

REPORT
ON
THE WORKING
OF
THE PENAL SETTLEMENT OF PORT BLAIR.

BY
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AND
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FROM

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Bengal Civil Service,

and

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TO

THE SECRETARY TO THE GOVERNMENT OF INDIA,

HOME DEPARTMENT.

Dated Calcutta, the 26th April 1890.

SIR,

IN accordance with the instructions contained in your letters No. 7, dated 6th January, and No. 80, dated 15th January 1890, we visited the Penal Settlement at Port Blair, and conferred with the Superintendent in regard to the points mentioned in your letters and such other matters connected with the working of the Settlement as the limited time at our disposal enabled us to discuss.

In Appendix A annexed to this report will be found a diary of our proceedings, showing the steps taken to obtain information on all points which we found it necessary to enquire into. We were fortunate in being able before leaving Calcutta to visit the Alipore and Presidency Jails with Colonel Cadell, and in having him as a fellow-passenger on board the *S. S. Peshwa*.

Before proceeding with our report, we desire to express our acknowledgments to Colonel Cadell for the excellent arrangements he so kindly made to show us over the whole Settlement and to obtain for us all the information we required. The Medical Officer in charge, Dr. G. P. Mackenzie, was unfortunately incapacitated by sickness from accompanying us on our inspections of the hospitals and other sanitary arrangements, and we were unable to discuss with him the improvements which suggested themselves in the course of our enquiries.

2. Preference of convicts for transportation as compared with imprisonment in Indian jails.—The first point to which our enquiry was directed was the statement made in the Report on Jail Administration in India which is quoted in full in paragraph 2 of your letter of the 15th January. As there was a large number of prisoners awaiting transportation in the Alipore Jail, we had a good opportunity for testing the correctness of the statement that prisoners preferred transportation to Port Blair to imprisonment in Indian jails. Accompanied by Colonel Cadell, we visited the Alipore Jail and saw about 120 prisoners who were to be despatched on the following day to Port Blair. Besides these persons, we had paraded for our inspection a large number of old and decrepit transportation prisoners who had been finally rejected by the Medical Committee and were therefore undergoing their sentences in the Alipore Jail. There was also among the prisoners a Sikh convict who had recently escaped from Port Blair and had been re-captured. Without a single exception both those who were about to start for the Andamans and those who had been rejected expressed a desire to be transported rather than undergo their sentence in Indian jails. The escaped convict, although he knew that stripes and the chain gang awaited him at Port Blair, was most urgent in his request to be sent at once to the Andamans. The conclusion we arrived at was that the Jail Committee had represented ac

the feelings and views of Indian convicts as regards transportation to the Andamans. Our visits to the Alipore and Presidency Jails and our inspection of the stations of the Penal Settlement have left no doubt in our minds that confinement within the walls of an Indian prison is now a much more severe form of punishment than transportation, and we are convinced that this fact is well known to the criminal classes. The causes which have led to this change of opinion in regard to the once-dreaded "*Kālapāni*" are not far to seek, and may be stated briefly as follows:—

- (1) The constant movement to and from Port Blair of short-term transportation prisoners, many of them habitual criminals, has carried information regarding the life of a convict in the Andamans into all parts of the country.
- (2) The plan adopted by some Governments of having prisoners received from Port Blair released at the jails of the districts in which they were convicted has helped materially to circulate this information among a large number of prisoners in the jails through which they have passed before release.
- (3) There is no doubt that the abolition of extra-mural labour and the strict confinement of prisoners within jail walls have made jail life in India much more penal than it used to be. In the Andamans the great bulk of the labouring prisoners pass their days in the open air, and are shut up in barracks only at night.
- (4) While the jail system throughout India has become much more penal in other respects, the general principles of administration in the Penal Settlement of Port Blair have remained what they were after the reorganization of 1874.
- (5) It is also easy to see that the great changes and improvements which have taken place in the means of communication in India must have exercised some influence in overcoming the dread natives formerly felt of leaving their own country. The journey from Calcutta or Madras to Port Blair is but three and a half days by steamer, and the voyage is now performed under conditions of little hardship, and is in no respect likely to be more dreaded than a voyage to Rangoon, which hundreds of Indians voluntarily undertake every year.

3. Impossibility of making discipline in transportation as severe as discipline in jails.—If it was the intention of the Legislature that the place of transportation in the scale of punishment should be second only to the capital penalty, and above all term imprisonment in India, there can be no doubt that, as at present administered, transportation to the Andamans does not fulfil this intention; nor do we think it possible, by any practicable changes, to secure that it shall fulfil it. But we do not think that it was ever the intention of Government that this should be the object aimed at. In the Penal Code (section 55) a sentence of transportation for life is treated as the equivalent in point of severity of a sentence of imprisonment for 14 years, while for European and American prisoners (section 56) transportation for 10 years is reckoned as equal to penal servitude for six years. In section 75, again, a maximum term of imprisonment of ten years is given as the alternative to transportation for life. In the discussions which have previously taken place as to the penal character of transportation, in 1838, in 1868, and in 1874, it has been admitted that it is impracticable, and not only impracticable but undesirable, to make labour in transportation as severe and penal in its nature as labour in jails in the prisoner's native country. The exile which the punishment involves is intended to be its most deterrent feature, and the object of the convict's life in the Penal Settlement should be to do that which, in our Indian jails, we have been obliged to renounce as impossible of attainment, *viz.*, to effect his reformation by removing him for a long period from the scene of his crimes and by placing before him the prospect of substantial advantages which he can earn by continued good conduct.

Our enquiries at Port Blair have convinced us that, with the large mass of transportation convicts under life sentences, this system of treatment has had

the most beneficial effect. Of 12,519 convicts at the end of 1888-89, 9,093 were life-convicts. Of these 3,285 were self-supporters, that is, they had attained the status almost of free persons within the Settlement, living a domestic life in their villages, cultivating the soil, and earning money by trade, service, or agriculture. To this condition well-conducted male convicts can attain after 10 years of penal labour, that is, after half their term of exile has expired. We have seen many villages of these people, and had much talk with them; and from all we have heard, and the impressions we ourselves have gathered, it appears to us that the system yields the most satisfactory results in promoting the reformation of transported offenders. Crime among self-supporting convicts is extremely small; self-respect again asserts itself, and however bad their previous career may have been, the great majority of them appear to lead quiet, industrious, and creditable lives, which, when after the completion of their 20 or 25 years' exile they eventually return to India, must, we think, make them indisposed to relapse into a career of crime. It must be remembered that of 12,519 convicts at Port Blair on the 31st March last, no less than 8,179 were transported for murder and 313 for causing grievous hurt. These offences, which form more than two-thirds of the whole, are not in India the crimes of habitual criminals. A course of discipline which, while adequately protecting society, effects the gradual reformation of the offender and his re-establishment as a useful member of the community should not in our opinion be condemned merely because it is less severe and penal in its character than that to which prisoners are subjected in Indian jails.

4. Some increase in the penal character of the initial stages of life in transportation is possible and desirable.—Although, however, we think that it would be a misfortune if financial or other exigencies should at any future time compel the Government of India to close the Andamans to transportation convicts and to substitute for that form of punishment confinement in Indian jails, which it is impossible to make reformatory, however much we may succeed in making it deterrent, there are some points in which we think that the procedure followed in the Penal Settlement is open to improvement, with the view of making the treatment more penal in its initial stages, of avoiding the evil of diminishing the dread with which expatriation should be regarded by criminals in India, and of dealing more systematically than is at present done with the class of habitual and dangerous offenders; and we have, after full and careful discussion of the subject and frequent consultation with Colonel Cadell and the most experienced officers of the Settlement, decided to offer the following suggestions for the consideration of the Government of India.

5. Transportation of male term-convicts from India should be discontinued.—It is, in our opinion, absolutely necessary to prohibit the transportation of male Indian term-convicts to Port Blair. It will be remembered that the Committee of 1838, which included some of the most distinguished officials who have ever served the Government of India, were unanimous in holding that transportation should be for life only. The same conclusion was arrived at, after some years' experience of the deportation of term-convicts, by the Government of India in 1868 (*vide* Home Department Resolution No. 2028—2040, dated 28th December 1868). It was the recommendation of Mr. J. Scarlett Campbell in his report of the 16th August 1872 (paragraph 54), and the policy was only changed in 1874, on the representation of the then Superintendent, Sir Donald Stewart, supported by Sir Henry Norman, "that it was to term-convicts that we must look in the main for reliable men to fill the large and important body of petty officers." We quote Sir Henry Norman's summary of Sir D. Stewart's views:—

As a rule he does not think a life-convict can be relied on as a check on his fellows. He has found that all those who take an interest in and are efficient in their work, whether as petty officers, artificers, fishermen, boatmen, and servants, are term-convicts; and he has come to the conclusion that no discipline, training, or treatment can produce their equivalent from a class composed of life-prisoners. He also thinks that the mixture of the class who know that if they behave well they will return to India with those who are more or less without hope in this respect is an important element of safety. In fact, we must use convicts in positions where they must be trusted, while a body composed of only life-convicts can never be trusted with certainty.

It will be seen that, shortly stated, an admixture of term-convicts with those under life-sentence was considered necessary for the safety of the Settlement. It was thought that the latter, who at the time when Sir D. Stewart wrote were without any hope of release, had one great bond of sympathy between them which might overcome all differences of nationality and creed and induce them to combine against the authorities. With the introduction of the rule allowing the commutation of a life sentence after 20 or 25 years' residence in transportation, this danger has disappeared. At present with very few exceptions all the life-prisoners in the Settlement are really term-convicts who have passed certain periods of their sentence. There remains therefore no common bond which could unite the present life-convicts, or make their interests the same. If for the security of the Settlement short-term prisoners are no longer required, their absence is greatly to be desired if frequent communication with India and Indian jails is to be put a stop to. More than this, it is impossible to make life at Port Blair sufficiently penal or deterrent for these men. They are not allowed to become self-supporters, and thus are not brought under what is certainly the most wholesome and successful part of the transportation system, *viz.*, the reformatory character of the ticket-of-leave rules, by which a prisoner is encouraged to start life afresh, and gradually train himself to habits of self-reliance, industry and thrift. It is no longer the case, as in Sir Donald Stewart's time, that the majority of petty convict officers are term-convicts; on the contrary, the most useful of them are under life sentences. The only difficulty that would have to be provided for if the transportation of term-convicts was prohibited would be the supply of prisoners for boats and for other marine work. Colonel Cadell attributes the recent immunity from boat escapes to the orders passed by him which forbid the employment of life-convicts on this work. We found, however, that a large number of the men now actually employed in boats had sentences of 10 years and over, and as a number of these were Burmans,* who are believed to be ready to avail themselves of any means of escape without reference to the period of their sentences remaining unexpired, the immunity must in some measure be due to the control exercised over boats by the new Police, and also to the larger number of steamers available at Port Blair for chasing craft reported to be missing. If a selection were made of prisoners who had passed five or seven years of their sentence of 20 years, and such races as Bengalis, Beharis, and Hindustanis only were taken for boat work, we think that the further importation of term-convicts for this work might at any rate be deferred until it is proved by experience that life-convicts cannot safely be trusted with boats. For work in heavy lighters some Settlement Officers think there would be no danger in employing even recently convicted life-convicts. If short-term men are found absolutely necessary for boat work, we would recommend that Burmans should be used for the purpose. What we have written above does not to the same extent apply to Burman prisoners. Life-convicts sentenced to transportation in Burma are now as a rule sent to Indian jails; the experience of the short-term men sent to Port Blair could not therefore have the least influence in making sentences of transportation less deterrent in Burma. The climate of the Andamans resembles that of the Tenasserim Coast, and Burmans keep their health well at Port Blair, and are exceedingly useful as artificers. It would be a great loss to the Settlement to be deprived of the services of the Burman term-convicts now sent there; and with some increase in the penal character of the discipline at Port Blair as recommended below, we do not think that this is necessary. The Superintendent is of opinion that the removal of term-convicts would also diminish the supply of educated prisoners required for the clerical work of the Settlement. In regard to this point we make some suggestions later on.†

6. Settlement of released prisoners at Port Blair should be encouraged, and this class should be concentrated in the Southern District.—If it is advisable to render communication with India by the return of released convicts less frequent than it has hitherto been, we think that this object could also be attained to some extent by encouraging prisoners who have been released to settle at Port Blair. Hitherto this privilege has only been granted

One Burman prisoner, Nga Shwe Zin, convicted on the 25th August 1888, and sentenced to 17 years, we found actually employed as a fisherman.

† *Fide* paragraph 24, post.

in a small number of cases, and there is no doubt that the Divisional and District Officers find it inconvenient to have these people mixed up with the labouring convicts and self-supporters, who are also convicts on ticket-of-leave. It is the opinion of Settlement Officers of experience that all persons who desire to live as free settlers should be collected together in the Southern District, where there is practically no more reclamation work to be done by convict-labour. This would concentrate the full convict-labour force in the Northern District, and make the supervision more easy and effective. An increase in the number of free settlers would be of advantage in increasing the food-supply of the Settlement. It would also make it possible in time to dispense with a portion of the armed force which is now necessary for the control of a population wholly composed of convicts; and, what is most to be desired, it would help materially in making transportation deterrent if prisoners sentenced for life never returned to their homes. There are other reasons why the free settlers should be removed from among the convict population which it is not necessary to enlarge upon here; they affect the bringing up of children and their moral welfare and education. The evil effects of having boys and girls brought up among a large number of unmarried convict self-supporters are too apparent already to leave any doubt as to the advisability of some such measure as we now propose. To the argument that we should still have the children of married self-supporting convicts in the villages, we would reply that the eldest children of this class of convicts would hardly ever be over 9 or 10 years of age, and the greater number of children would be too young to be made the victims of lust. We give in Appendix D a statement showing the number of conditionally released persons and ex-convicts now settled at Port Blair. It will be seen that out of a total of 600 persons 468 are already settled in the Southern District.

7. Transmarine convicts should not be taken to jails in India before release.—If our recommendation that only life-convicts should be transported to the Settlement meets with approval, the rules for the release of prisoners returned to India should be altered, and the prisoners actually released either at Port Blair or, if that was found inconvenient, on arrival at Calcutta or Madras. We have already referred to the disadvantage of releasing these prisoners from the jails of their own districts. After a sentence of 20 years has been passed, and 10 of these have been spent in the grade of self-supporter, we do not think it can fulfil any useful purpose to subject those who are released to police supervision. In the case of dangerous characters under life sentences care is already taken to see that they do not leave the Settlement.

8. Suggestions for increasing the penal character of discipline at Port Blair in its earlier stages.—Much has been done of late years to make life in Indian jails more penal, and the recommendations of the Jail Committee will, if carried out, tend to still further improve the discipline and make imprisonment more deterrent. Under these circumstances, it appears to us necessary that steps should be taken to increase the penal character of imprisonment in Port Blair during the earlier stages of the convict's detention there, both in order that there may not be too great a disparity between the discipline in India and beyond seas, and also in order that the convict may be incited to lead a regular life in transportation by some experience of the severity of the preliminary stages to which a condemnation for misconduct will cause him to revert. We are satisfied that the existing rules for the treatment of self-supporters and prisoners who have passed half their time, viz., 10 years, in the Settlement are working well and have a decidedly beneficial effect in the direction of reformation. To change these rules and to make the lives of prisoners in this stage more uncomfortable would, in our opinion, be harsh and unnecessary. We are however anxious to see some reforms introduced in the earlier stages of imprisonment and to improve, if possible, the detailed supervision in the Settlement.

The principal reforms we recommend are as follows :—

- (1) A system of classification to distinguish between habitual criminals sentenced to transportation under section 75 of the Indian Penal Code and those convicted for the first time, and the more complete segregation of female convicts.
- (2) The introduction of a preliminary stage of separate confinement.

- (3) The organisation of a second stage involving confinement in association, but within a limited area, and with a strict system of jail discipline: the labour in this stage to be intra-mural.
- (4) The postponement of the present 3rd class stage until 24 months have been passed in the first two stages above referred to: this stage to last for three years, the privilege of receiving dry rations in lieu of cooked food not being allowed during this period.
- (5) The present 2nd class stage to be reached not earlier than five years from the date of sentence. It is proposed also to abolish the distinction between grades A and B of this class, and to have only one grade with an allowance of 12 annas per mensem.
- (6) The restriction or abolition of money gratuities for prisoners employed in the lower grades of convict officers, and as artificers or departmental servants.
- (7) To gradually introduce the use of Indian corn grown in the Settlement in the dietary in the place of a certain proportion of wheat.
- (8) To devise a uniform diet scale for all races and classes of prisoners who are in good health.
- (9) To improve the general management of the Settlement and to increase the discipline and supervision by reorganising the superior and subordinate establishments.

We proceed to offer some explanatory remarks under each of these heads, and shall close our Report with some minor recommendations on miscellaneous matters which came under notice in the course of our enquiry.

9. Classification of habituals and non-habituals.—No system of classification exists in the Settlement, and no attempt has been made to distinguish the habitual thief from a prisoner convicted for the first time of an offence which does not indicate a criminal career. The only disqualification which attaches to an offender against property is that he may not be employed as a servant (Andaman and Nicobar Manual, sec. 143). The Jail Committee in their Report (paragraph 36, page 13) have expressed themselves as opposed to too minute a classification of prisoners, which cannot be properly carried out, but have strongly advocated the complete segregation of all habitual offenders. In this opinion we entirely agree. As long as the number of habituals received at Port Blair was comparatively small, no inconvenience beyond the petty thefts committed by them appears to have been felt (*vide* statistics given in Appendix B). With a large increase in the number of these prisoners which we hope will be sentenced to transportation in future,* it would be unwise not to establish a system of complete separation between them and those convicted for the first time or of offences other than those against property. This could easily be done in the earlier stages by keeping them in separate barracks and stations, and prohibiting their employment on any labour which would remove them from the close supervision of their convict officers. The question of a distinctive dress for habituals will require consideration. While we are not disposed to mark all the prisoners of this class with special clothing, we certainly think that those of the habituals who have committed offences against property after their arrival in the Settlement should be distinguished in some way as incorrigibles. This would enable the petty officers to recognise at once those prisoners who require extra supervision. Some hope of reformation might, however, be held out even to these men, and their clothing changed if they had no thefts recorded against them for a certain period, say five years. It is not proposed to carry on the system of classification to the grade of self-supporters. A habitual criminal who has during a long imprisonment of 10 years shown no tendency to commit offences against property should, in our opinion, be allowed to live with other prisoners in the villages occupied by self-supporters.

10. Habitual offenders under section 377, Indian Penal Code.—It has already been found necessary in the cause of morality, and for the purpose of preventing murderous assaults, to separate the younger prisoners who are known to be habitually given to unnatural offences. These prisoners are dis-

* *Idem* *infra*, paragraph 27.

tinguished by having to wear coloured coats, and are segregated in a separate barrack at night. In our opinion this measure must have had a beneficial effect, and we would recommend that it should be continued. But it is essential to the proper management of these incorrigible prisoners that they should be completely isolated from each other at night in cubicles or cells. Owing to the inflammable nature of the materials used in building the present barracks, it has not been considered safe to lock up each prisoner in his cubicle. Some modification of the plan of opening all the cubicles simultaneously, such as that adopted at the Alipore Reformatory School, would meet this risk from fire. But nothing short of proper cellular accommodation will, in our opinion, be found satisfactory.

11. Segregation of female prisoners.—Female prisoners who have not received tickets as self-supporters or been allowed to marry are confined in what is practically a female jail at South Point. We were surprised to find, however, that the segregation is not as complete as it should be. A certain number of male convicts work with the females at such industries as clothes-washing (for the troops and European officers) and tailoring, and a large batch of 20 females are brought over every day to the Commissariat godowns to work at cleaning wheat and sifting flour. At South Point, near the worksheds for females, but separated from them by a palisade, are worksheds occupied by male convicts who assist in preparing warps and weaving cotton clothing, and quite adjoining the palisade is a self-supporters' village of five or six houses called Kumbhár Line. The clothes-washing industry is an unremunerative one, and should be removed from the female section. A wash-house might be built near the escape of the new reservoir in which male convicts could be employed under proper supervision. The hill sides in the vicinity afford ample room for drying grounds. The female prisoners who are now on the washing work should be taught the use of sewing machines, and the whole sewing of the convict clothing should be done here. Sewing machines are said to get out of order and to require repair, but this cannot be held to be an insuperable bar to their use here when they have been used for many years with great success in the jails in India. If it is necessary to employ a male convict to do the clerical work of this section, his duties should be confined to a room to which the female prisoners cannot have access. We would also recommend the discontinuance of the practice of taking out a gang of female prisoners for employment in the godowns in Ross. The work these prisoners do is particularly well suited for male convicts who from various causes are unable to do hard extra-mural labour. If 20 male prisoners who could never be fit for any harder form of labour were selected and taught this work, they could be lodged in Ross and be always available for duty in the godowns when required. We hope to make recommendations which will somewhat increase the number of female convicts in the Settlement. If these recommendations are approved, and a sufficient amount of female labour is available, the assistance of male convicts in warping and weaving should be discontinued. The idea that there are some parts of the weaving industry which cannot be done by females is an erroneous one, for it is well known that in the Russia and other female jails in India this industry has been most successfully worked entirely by women.

In our opinion the hospital for women at Haddo should be removed to South Point. At present the females in that hospital are treated in the upper story, while the male convicts awaiting admission are paraded below.

There is another point in regard to the segregation of females which deserves attention. The rules require that the family of a self-supporter who is convicted of any offence and sent to the chain gang or reduced in class should be accommodated in the female section. These women bring their children of all ages up to 12 with them. A separate barrack is set apart for these families, but we would advocate their complete separation from the females still undergoing imprisonment in the 2nd class. It will materially improve the discipline and prevent unnecessary communication with the outside world.

A few cells might be provided for females under punishment. If these cells were fitted with looms, they would be of considerable help in teaching the more refractory characters to weave.

Before leaving this subject we would recommend that when bricks and labour are available, a wall 10 feet high should be built to take the place of the present palisade round the Female Jail. The removal of all huts of self-supporters from this neighbourhood is also necessary. Until a wall is built, it might be possible to cut off communication by having a hedge and ditch a hundred feet from the present palisading to prevent male convicts approaching the palisade, which they can now do at any time. It must be remembered that only women are employed on guard duties within the palisade.

12. Preliminary stage of separate confinement in cells.—Our next recommendation for making the earlier stages of imprisonment in the Settlement more penal is that there should be a preliminary stage of separate confinement in cells. In the English and other European prison systems this preliminary stage has been worked for many years with the greatest success, and it is now considered essential in the management of jails where prisoners sentenced to penal servitude are first received. The introduction of this system of separate confinement has been retarded in Indian jails chiefly on financial grounds. An example has, however, been set by the Madras Government in this direction which will no doubt be followed by other Governments as funds become available. The close confinement of prisoners for long periods in the Madras cellular jails and in one of the jails in Bengal (Midnapore) has shown that there is no reason to fear any deterioration in health either mentally or physically, if the condition of those undergoing confinement is carefully watched. In deference to the opinion held by Colonel Cadell that it might prove injurious in the case of men already suffering from mental depression on first arrival in the Settlement, we would recommend that this preliminary stage should, for a year or two, be tried only with habituals or specially selected prisoners who have been sentenced for very serious crimes. The rules to be followed for regulating this preliminary stage should be those in force in English prisons. Instead, however, of starting with the maximum period of nine months a lesser term of six months might be tried at first. To enable the authorities to carry out this system, a cellular jail containing at least 600 cells should be constructed without delay. Even if the system was found unsuitable for transportation prisoners, the jail could take the place of Viper as a jail for the ordinary purposes of the Settlement. In the appendix will be found a special report on the Viper Jail.* From this it will be seen that we consider it altogether unsuited for the purpose for which it was originally designed, and would like to see it replaced by a cellular jail. If 600 cells were available, it would be possible to carry out six months' separate confinement in the case of 600 prisoners, which is about the number of life-prisoners that are now received yearly from India. When the system was found to work successfully, the number of cells could be gradually increased to meet all requirements, including the accommodation of prisoners now sentenced to the chain gang.

The site to be selected for such a jail is a matter of some difficulty. There seems to be still some doubt as to the localities in Port Blair which can be considered non-malarious. Judging, however, from the fact that such promising sites on the sea shore as Perseverance Point, Navy Bay, South Point, and Mangle Bay have all at some time proved extremely unhealthy, it would be advisable to select a well raised inland site. Such a site might be found in Adelaide which, besides being healthy, would be near the Police lines and close to the residences of the officers appointed to supervise the jail. The only drawback to the site would be the carting of the material for the building of the jail and the carriage to and fro of raw material and manufactured goods when the jail was in working order. It might be possible to find good clay in the neighbourhood for brick-making. As the jail would be entirely built of brick, the bricks should be manufactured as near the site as possible. Local officers and Europeans are of opinion that the good hard land on Viper Island would be the most convenient site for the cellular jail. Besides the possible difficulty of having to carry a large pile of material to the site, the only advantage of the site is that it is a well raised site. As yet no other site has been suggested.

The plan of cells that we would recommend is that adopted in the Madras close prisons. The buildings should be well raised, and should, if possible, be two storied. The doors of the cells should face the north-east, and should be protected by a verandah running along the whole length of the building. The entrance to each cell should be protected by iron-grated doors, and the locks removed from within the reach of the prisoners in the manner adopted in the cells at Viper.

The advantages claimed for this system of preliminary confinement are: (1) Its great effect as a deterrent punishment. (2) The opportunity it affords for studying the character of each individual prisoner and coercing the lawless spirits who have known no control. (3) The improvement which it will secure in the discipline and work of the prisoners in the Settlement when they know that they will be sent back to separate confinement if they give trouble. Instead of giving long sentences in the chain gang which can be evaded by going to hospital, Settlement Officers would use the cells as a punishment for shorter periods and with far more effect. (4) The preliminary confinement would be an excellent means of acclimatizing prisoners without exposing them to the weather. Here also the health of the prisoners could be noted with accuracy, and their subsequent selection for special work made more easy. (5) In this stage it will be easy to teach educated prisoners the Roman character, and so increase the number of prisoners qualified for work as writers. (6) It will enable the authorities to dispense with the use of fetters on first arrival or as a punishment. This in our opinion is a matter of considerable importance in a climate where the slightest abrasion has a tendency to fester and to pass rapidly into the stage of severe ulceration. The great loss of health and the large number of admissions to hospital from wounds and ulcers will be noticed in the medical portion of this Report.

13. Second stage of intra-mural labour.—If a preliminary stage, such as that sketched above, is adopted, the change from it to the freedom of the ordinary 3rd class stage now in force in the Settlement would, in our opinion, be too sudden. We would therefore recommend the introduction of a stage requiring confinement in association, but in a restricted area, in which the prisoners could work on intra-mural industries. The full discipline of the jail system now approved for Indian jails should be adopted, together with the necessary parades organized to control prisoners throughout the day. In this stage every effort should be made to exclude convicts entirely from the use of tobacco and liquor. The barracks on the islands of Chatham and Viper, or on Viper alone, might be used for this stage. We would recommend that 18 months should be passed in this stage, making a total of two years before a prisoner is moved into the 3rd class.* A specially selected jail officer of experience should be appointed to organize the details for the management of prisoners in this stage. The advantages claimed for this recommendation are: (1) That it will make the earlier period of transportation more penal and deterrent. (2) That acclimatization will be completed in the healthiest localities in the Settlement, and it is certain that the very high death-rate which now prevails among the new arrivals will in a great measure be prevented. (3) It will be possible to still further study and record the character of all prisoners who come to the Settlement, and will make it easier to deal with them in the later stages. (4) All prisoners selected for the Artificer Corps will begin their training for the various industries in this stage. (5) It will be comparatively easy to prevent the prisoners from having access to women, or obtaining tobacco and forbidden articles while they are in this stage.

14. Postponement of 3rd class stage till after two years and its shortening by one year.—Our next recommendation is that the present 3rd class stage of imprisonment should begin after 24 months have been passed in the first two stages above mentioned, and that three years should be passed in this grade. The privilege of having dry rations in lieu of cooked food should not be allowed in this stage. It will be noticed that the period to be passed in this stage has been shortened by one year to make up to some extent for the two years passed in the previous stages.

* Periods passed in the jails of India before transportation would be deducted from this period of 18 months.

15. Modification in the condition of 2nd class convicts.—Our 5th recommendation is that the 2nd class should not be reached earlier than the 6th year of sentence. We do not see any necessity for maintaining two grades, and would recommend that all the prisoners in this class should receive an allowance of 12 annas a month. This would result in the saving of 4 annas a month for each prisoner now in grade A of this class, which would amount to a total saving of about Rs4,300 annually.* From this 2nd class would be selected—(1) all the men required for officers' boats; (2) petty officers; (3) office writers; (4) ward-coolies; (5) servants to free residents. Men in this class would be supplied with dry rations and jail clothing, and uniforms if appointed petty officers.

16. Restriction or abolition of money allowances.—Our next suggestion is to restrict or abolish pecuniary rewards for prisoners working in the artificer and departmental gangs and for convict officers. What these rewards are will be seen by reference to sections 242, 246, 247, and 248 of the Manual. An officer of much experience used in conversation the expression "there is too much money in the Settlement." In this view we agree. We see from the remittances made to friends in India that prisoners who are not self-supporters find it easy to accumulate enough not only to give them a fair start when their turn comes to begin life as self-supporters, but also to make presents to their friends. If some system could be devised of rewarding prisoners who do special work without giving them money, it would, in our opinion, be a great advantage, and would result in a considerable saving, which could be applied to such very urgent requirements as improving the European supervision. In our opinion, and in that of some officers of experience in the Settlement, a mark system could be devised by which convict officers, artificers, and other prisoners employed on skilled labour in the different departments could be allowed to reach the position of self-supporting convicts at an earlier period than 10 years—the term now fixed for the ordinary well-conducted labouring convict. As all the prisoners who now receive money gratuities are under the supervision of European officers and supervisors, there would be no difficulty in carrying out the mark system thoroughly well in their case. Indeed, it is not certain that it would not be easier than keeping up the present procedure of accounts and payments in cash. The mark system might be either on the Indian plan, by which a certain number of marks are equivalent to a day's remission, or on the English plan, which works in the opposite direction, that is to say, a prisoner starting with a given number of marks gets his ticket as a self-supporter when there are no marks left against him. The advantage of a mark system will be that the prisoner will be rewarded either daily or weekly for the actual quality of the work done and for good conduct, and this constant stimulus will keep him up to his work better than a monthly gratuity. Mark fines would be an excellent punishment for offences connected with work, because they do not involve the loss of the prisoner's services. We think that the system when devised should not grant a greater remission than a maximum of 25 per cent. of the original term of 10 years. If such a remission was fixed, the very best workmen of exemplary conduct would possibly earn their tickets as self-supporters in, say, $7\frac{1}{2}$ years, while comparatively inefficient artisans might only earn them in nine years. It would naturally be an advantage for the prisoner to enter the Artificer Corps as soon as possible. Prisoners who receive gratuities after their fifth year, such as petty officers, and those skilled workers who are only employed for broken periods in industries like brick-moulding, blanket-weaving, &c., should in the same manner be allowed a remission of 25 per cent. for the aggregate period during which they are employed. In the case of the higher convict officers the remissions for the periods passed in those grades might be larger, as is the case in the Indian mark system. We are disposed, however, to think that jemadars and possibly tindals should continue to be paid officers. These are the picked men of the Settlement, and there is some chance of discipline deteriorating if they, like other prisoners, are lost to the service by being given tickets as self-supporters. In their case it might be advisable to require a certain number of marks as a qualification for promotion to the highest grades, and then to maintain the present scale of salary, which we believe is considered more

* The Report for 1888-89 shows 1,435 prisoners at present in grade A of class 2.

worth having than a ticket-of-leave. From these men could be chosen the chaukidars and chaudhris of villages, who are paid from the proceeds of the tax now levied on each house.

The advantages we claim for these recommendations are a very large saving to Government in the amount of money now expended in salaries and gratuities, which would help to reorganise on a more satisfactory basis the present subordinate service. The money now in circulation among the convicts and hoarded by them would be reduced, while the plan of rewarding merit would be more exact, and would lead in the most deserving cases to the earlier attainment of what we have already referred to as the most satisfactory feature of the system in force in the Settlement, *viz.*, the stage of self-supporter.

17. Remittances to India by convicts and on account of deceased convicts' estates should be stopped.—We have already noticed the fact (which attracted attention on inspection of the books kept in the Ross Divisional Office) that remittances by convicts to persons in India through the Post Office are somewhat numerous. The following is a statement of these remittances during the last two years:—

	1888-89,	1889-90.
		(10 months only.)
Number of remitters	70	84
	R A. P.	R A. P.
Amount remitted	2,654 0 0	3,572 0 0
Average amount of each remittance	37 14 7	42 8 4

Several of the remittances were made by convicts who were not self-supporters, but in class 2, grades A and B. It appears to us that the receipt of such remittances in India must tend to detract from the deterrent effect of transportation, and that they should not be allowed.

In connection with this subject, we would draw attention to the rules as to the disposal of property which convicts dying during the currency of their sentences in the Andaman and Nicobar Islands had, as convicts, been suffered to acquire in the course of their employment in those Islands, sanctioned by the Governor General under section 34 of the Prisoners Act, V of 1871, and published in January 1889. These rules provide that a convict who has served with good conduct for three years as a self-supporter may, by a special order in writing made by the Superintendent, be permitted to dispose by will of his property acquired during residence in the Settlement, and, if he bequeathes it to a person in India, it must be made over to that person. We find that both Colonel Cadell and his *locum tenens* Colonel Tucker, during whose administration the rules referred to were made, were of opinion that persons outside the Settlement should not be held entitled to succeed to the property of convicts dying while under sentence. In paragraph 8 of his letter No. 260, dated the 5th July 1888, the former wrote—"If relatives or others in India were to be allowed to succeed to such properties, the dread of transportation would be greatly lessened." We agree in this opinion and recommend that the rules be reconsidered, and that the privilege of making a will, as well as that of succession *ab intestato*, be confined to the Settlement itself. It may no doubt be urged that a convict who survives to return to India is entitled to carry with him the proceeds of his property in Port Blair, and that the concession of the power to dispose of such property by will is no more likely to render transportation non-deterrent than the arrival in his native place of a returned convict with the proceeds of his industry in the Settlement. But it seems to us that the two cases are not parallel. The returning convict himself enjoys the fruits of his labour at Port Blair, and is enabled, after years of life as a self-supporter, by means of his savings to set himself up in an honest living at home; it would moreover deprive him of a powerful incentive to good conduct if he were not allowed to carry his earnings in the Settlement out of it on his release. In the case of a deceased convict these reasons do not apply. Any property which he may leave to his relatives or friends in India cannot but be a windfall to them. Since only life-convicts can become self-supporters and are thus in a position to acquire more than trifling sums, he must have been long separated from his family, who cannot, as pointed out by Colonel Tucker in paragraph 5 of his letter No. 586 of the 22nd November 1888, be said to be dependent upon him. Such a windfall, coming unexpectedly into the hands of people who had given the convict

up as dead and perhaps forgotten all about him, would be much talked of in a country neighbourhood, and would be likely to create quite false ideas of the advantages of deportation to the Andamans.

18. Substitution of Indian corn for wheat in diet scale.—It is well known that there is no detail of jail management which affects Indian prisoners so much as that which refers to their diet. In respect to diet, the prisoners in the Settlement are very much better off than they now are in any Indian jail. This is chiefly due to the fact that since the diet scale for Port Blair convicts was framed, a great change has taken place in the views of jail officers in regard to the quality and kind of food that should be given to convicts. The Jail Committee in their report refer to this point in the following words:—"It has often been asserted as an axiom of jail management that a prison diet scale should be composed entirely of those staples of food to which the poorer classes of the locality are accustomed, and that it is a serious mistake to introduce into a jail diet such articles as honest poverty cannot obtain (save as occasional luxuries) during a life of labour." The diet scale now in force in Port Blair is a liberal one as regards quantities, and the cereals used are rice and wheat. The former is supposed to be issued to rice-eating races, and the latter to those who use dry grains. It is a startling fact that, although the Settlement has been occupied for over 30 years, not one grain of the cereals issued to the labouring convicts is, according to the Commissariat Officer, grown at Port Blair. It is true that the self-supporters feed themselves to a certain extent on rice grown on their own lands, but the whole of the grain issued to the convicts and required for the use of the troops has to be imported. Stating this fact in figures, we find that the wheat imported into Port Blair during the year 1888-89 cost $\text{Rs. } 1,55,643$, and the rate per maund, including freight, &c., was over $\text{Rs. } 11$. The value of the rice imported amounted to $\text{Rs. } 1,49,747$, and the rate per maund was $\text{Rs. } 7$. The rate paid for Indian corn and paddy grown locally is $\text{Rs. } 1.4$ a maund in each case, and these grains have hitherto all been used for the feeding of animals. Our suggestion is that the cheaper grain grown in the Settlement should be used for the prisoners to a certain extent. It is roughly calculated that it would lead to a saving of about $\text{Rs. } 40,000$ annually if the diet was composed of one-third of rice, wheat, and Port Blair Indian corn, respectively. It will be possible to import cheap food for cattle from Madras to take the place of the Indian corn and paddy which is locally produced. The figures above given will, we hope, add force to what we say in regard to the necessity of using the cheaper grains for food for convicts.

A general idea prevails among all classes in the Settlement that Indian corn grown in the Andamans is unwholesome, and its use is said to cause rheumatism (*bāt*). There appears to us to be no reason for this belief, and Colonel Cadell has, at our suggestion, begun to test the effect of Indian corn as a diet given in the proportions above quoted, namely, one-third each of rice, wheat, and Indian corn. The test is being applied under the supervision of an experienced officer who is now in charge of the hospital on Ross. If the proposed diet is found a success in Ross, it will be further tested in the hospitals at Haddo, Chatham, and Viper before being issued to the prisoners generally. By this means it is hoped that all chance of injury to health will be avoided, and it will be demonstrated to the general body of the prisoners that there are no grounds for the belief that Indian corn grown in the Settlement is unwholesome. The system of cooking the Indian corn bread which we have recommended is that followed in the jails of Bengal. The corn-flour, previously moistened with hot water, is placed in a cloth and put into boiling water until all the starch cells are burst and their contents cooked. The meal is then taken out, seasoned with salt, and made into *chupatties* in the ordinary way. It is impossible that Indian corn cooked in this manner can be indigestible. The proposed change will, we anticipate, be very unpopular, and it will require care and tact to introduce it among the convicts, as there is no subject on which they feel so strongly as that of changes in their prescribed rights as to food.

19. Other changes in the diet scale recommended.—Our next suggestion is that, instead of having different scales of diet for rice-eating and wheat-eating races, there should be one scale for all healthy prisoners in the Settlement irrespective of the race to which they belong. Our reasons for making this recommendation are that it has now been demonstrated in Bengal and the

North-Western Provinces that purely rice-eating peoples like the Burmans and Bengalis can be fed without any risk to health on grains such as wheat, millets, and Indian corn. The experience already gained in the Settlement also goes to show that the rice-eating races prefer one meal of wheat-flour, while Punjabis and other races who are dry-grain-feeders ask for one meal of rice. So that, as a fact, the basis of a uniform diet scale as regards cereals already exists in practice. The change we advocate should be made on the ground of economy not only as to cost of diet, but of labour in preparing diet rolls and issuing diets.

The fat in the food is issued in the form of ghee, all of which has to be obtained from India at considerable expense. We are of opinion that an effort should be made to supply ghee made in the Settlement. We notice that, whereas the Jail Committee recommend half an ounce of oil or ghee per diem for each prisoner, the allowance at Port Blair is double—nearly one ounce. This large amount may be necessary for prisoners employed in hard extra-mural labour such as jungle-cutting and brick-making, but for ordinary labouring convicts it should be possible to reduce it, especially in the two earlier stages of confinement we propose to introduce.

The question of substituting milk for *dahi* in the rains when the prisoners are said to prefer it should also be considered. The supply of fish in some parts of the Settlement is said to be deficient. In the new scale the possibility of making some change in this article of diet should be considered.

The services of Dr. Weir, the recently appointed Senior Medical Officer, could be utilized in drawing up such a scale as we advocate. Before taking up the subject he should study the opinion expressed by the Jail Committee on the question of jail diets, and also the scales of diet now in use in Indian jails. While we strongly recommend the use of a single scale of diet for all prisoners in health, we would as strongly draw attention to the necessity for watching closely the condition of the weakly prisoners with impaired digestions, who require to be treated as individuals in the matter of food and not as parts of a homogeneous crowd.

20. Reorganization of the supervising and subordinate staff.—The last recommendation we have to offer with the view of making transportation more penal is that there should be better and more trained supervision to control the prisoners in the Settlement. In our opinion the time has come to examine the organisation of the whole Settlement service in all its branches, and in the light of the experience that has been gained to suggest such improvements as appear to be necessary. The scale now in force was introduced in 1874, and has not been altered since.

21. Superior Service.—In regard to the superior executive service, the main difficulty has been the recruiting of suitable officers to fill the posts in the lower grades of Extra Assistant Commissioner, in which there are four appointments carrying the same pay, namely, R250 rising by yearly increments of R25 to R400. Candidates who have had no previous training of any kind have hitherto been appointed, and much difficulty has been experienced in dealing with those cases in which officers have been found quite unfit for their posts. The service consists of a Superintendent, Deputy Superintendent, Assistant Superintendents, and Extra Assistant Superintendents. It was at first intended that the distinction which is made in India between the covenanted and uncovenanted service should be maintained here between the two grades of Assistants and Extra Assistants. After some years of experience in actual working it has been found that it is difficult if not impossible to maintain this distinction, and as a fact promotions have invariably been made from the lower to the higher grade when an officer's turn for promotion arrived and he was not deemed unfit. Provided that suitable officers are recruited at the bottom of the service, we see no reason why such a small service as this should not all be organised on the same basis, so that promotion may go on from the lowest post to that of Deputy Superintendent. We would however strongly recommend that promotion from grade to grade should be made by selection and not by seniority.

The following proposals have been framed in consultation with Colonel Cadell:—

- (1) That the Assistant Superintendents should be recruited as a general rule from the grade of Assistant Superintendents of Police in the Police Departments of Bengal, the North-Western Provinces and the Punjab. We limit the choice to these three Provinces as the officers in them know Hindustani, which is the language of the Settlement.
- (2) That the officer selected should be trained in a Central Jail for six months in the management of large bodies of convicts and in the routine duties and discipline of a large prison.
- (3) That the officer should be appointed on probation for two years, within which time if he is found incompetent to perform the special duties required of him he should be retransferred to his original service. This will also give a young officer who finds the work or the climate distasteful or unsuited to him an opportunity of leaving it. By this means it will be possible to gradually form a service in which all the officers have been well selected and have shown a special aptitude for the work.
- (4) The accompanying proposition statement (Appendix F) shows that we propose to offer a sufficient inducement to young Police Officers, who in their own province would be drawing Rs250 a month, to join the Settlement service by giving them on first appointment Rs350. This, together with a free house and some assistance as regards servants, ought to induce young officers of ability to accept these appointments.
- (5) It will be noticed also from the statement that we propose to abolish the system of giving annual increments below the grade of 1st Assistant Superintendent. In our opinion the gradual rise of salary in the different grades ought to be a sufficient prospect to look forward to. All the appointments below the Superintendent should be open to members of the service, and we would suggest that Colonel Cadell be requested to consider whether the appointment of District Superintendent of Police in the Settlement which is now separate might not be attached to the cadre of the Commission.
- (6) It should be distinctly understood that promotions from grade to grade will be made on the ground of merit only.

In regard to the duties of the officers of the Commission, we do not feel competent after such a short experience to offer an opinion, but we think that there is room for some improvement in the following respects. It appears to us unnecessary in the case of Divisional Officers of experience and judgment to have their routine work supervised and their orders in regard to punishments for convict offences subjected to appeal and revision by District Officers. An officer in charge of a Division who can be trusted should, in our opinion, be given as much power as the present District Officers possess. We are sure that this will lead to more harmony and that these officers will take a greater interest in working up their Divisions and thereby qualifying themselves for the higher posts.

In section 53 of the Manual will be found a statement detailing the powers of all officers as regards punishments for convict offences. It will be noticed that appeals from all orders by Divisional Officers lie to District Officers. As a fact the register provided for in section 178 is sent to the District Officer, and it is in his power to revise any sentence that may have been passed by the Divisional Officer without an application from the convict concerned. On the other hand, the Divisional Officer exercises powers under the Criminal Procedure Code which allow him to try summarily and to punish free persons in the Settlement under the Indian Penal Code without appeal. This is an anomaly which in our opinion should not continue to exist. Officers, even if they are in charge of Divisions, should be given powers in proportion to their experience and

standing, and subject always to special appeals to the Superintendent, which must be left open to prisoners, these decisions should be final. In the case of a young or inexperienced officer the powers should be limited, and the work done by him supervised by his immediate superior. Having inspected many of the registers in which convict offences are recorded, we are of opinion that the procedure is too elaborate for most of the petty cases which are recorded in them, and which in every Indian jail would be decided on the spot, recorded on a history ticket which is kept with the prisoner, and finally entered in the register of punishments. It would simplify the procedure considerably if the plan now followed in the jails of every province in India were adopted for dealing with the minor convict offences in the Settlement. The present register and procedure might be reserved for the more important cases in which no decision can be arrived at without a formal enquiry and trial. We refer in another part of this report to the necessity for introducing prisoners' history tickets into the Settlement. Before leaving this subject we would draw attention to the remarks made elsewhere in which we advocate the appointment of an officer having jail experience for organising the Viper Jail and giving effect to our recommendations regarding the introduction of the two first stages of imprisonment at Port Blair.

22. Subordinate Service.—The subordinate executive officers are called Overseers. We attach a list of these officers with their salaries and the stations of which they are in charge.* A glance at this distribution of Overseers shows that the Settlement is seriously undermanned as regards European supervision, and that there are large tracts of country and many distant stations and barracks which cannot possibly be properly supervised from the positions in which these subordinates are located. It is the opinion of many local officers that a considerable addition is required to this staff and some reorganisation needed for making it an efficient service. Hitherto it has been found impossible to take up this question of reorganisation in consequence of the difficulty of finding funds for the increased expenditure it will entail. If our recommendations on the subject of pecuniary rewards to prisoners are accepted, we believe that there will be a sufficient saving to meet all the extra expenditure it is now proposed to incur.

It has been the practice hitherto to take as an Overseer any European or Eurasian candidate who offered himself for the post. Some of those now in the service are old soldiers, and one was a Quarter-Master in the Indian Marine. This system of appointing a man who has no experience of the work, or who has spent the best years of his life in other callings, is one which can never be satisfactory. The appointment of unqualified outsiders has in the large majority of cases proved a conspicuous failure in the jail service in India, and the remarks of the last Prison Committee on this subject (page 31, paragraphs 27-28 and 29) apply with equal force to such a subordinate service as that with which we are now dealing. If the recommendation that subordinates for this service should be trained is accepted, we think the following procedure should be adopted. Lads of European parentage of fair education should be selected from the schools in India. The Matriculation Examinations of the Indian Universities, or the corresponding examination for European schools, might be accepted as the test of education, or the examination for clerks for Government employment might be considered a sufficient test. It would also be necessary to require a certain standard of height and bodily fitness for this service. The selected candidate should be made to spend a year in a Central Jail in acquiring a good knowledge of jail management and discipline, and in learning how to deal with large bodies of prisoners. Before being given his appointment at Port Blair as Assistant Overseer he should also be required to produce a report from the Superintendent of the Central Jail showing that his conduct has been good, that he is of steady and industrious habits, and possesses the tact and temper which are so essential to the management of convicts. It might also be necessary to arrange for at least another year's probation in Port Blair before the candidate is finally appointed to the service. On arrival at the Settlement he should be attached to one of the healthy Divisions, such as Ross or Aberdeen, where he could become acclimatized and remain for some time under the immediate supervision of experienced officers. The details of the

* One at Ross (R150); one at Aberdeen (R120); one at Chatham (R100); one at South Point (R130); one at Viper (R100); one at Paharguon (R80).

reorganisation we would suggest in this service in regard to the number of appointments, grades and salaries will be found in statement G. of the Appendix. It will be seen that we propose to make six new appointments in the service, thus doubling the strength of the establishment. If the convicts could be divided equally between these subordinates, this would give each Overseer or Assistant Overseer the charge of 1,000 convicts and self-supporters, and this would not be too much work if the convicts were confined in a circumscribed area. As however this is impossible, we would suggest that Overseers and Assistant Overseers should be located in the following positions: one at Ross, one at South Point, one at Aberdeen, one on the new Jail, one at Viper, one at Chatham, one at Pahargaon, one at Bumliton, one at Protheroeapur, and two in such places in the Northern District as may be found most convenient for the immediate supervision of the large bodies of prisoners that will in future be employed there in clearing jungle and other work. The remaining Assistant Overseer would be kept at Ross or employed as an Assistant in the new Jail, and would be ready to take the place of any subordinate who might be absent from work either on account of sickness or leave. We would have three grades of Overseers, and two grades of Assistant Overseers, and would recommend that the increments attached to the appointments should be granted only after good and approved service. If these subordinates came to know that the yearly increments were not awarded as a matter of course but for really good service, the effect on their work would be most marked. One of the worst features of the existing service is that these officials have been for years drawing low salaries, and having little or no prospect of an increase are not disposed to do more than their routine work. It would be useless to attempt any reorganisation without recasting in a liberal spirit the salaries to be given to the different grades. The present scale of pay would appear to have been fixed with reference to the pay drawn by European Jailors in India at the time this service was organised. In recommending the proposed scale we have been influenced by the strong recommendations made by the Jail Committee in page 32, paragraph 31 of their report. The arguments used in recommending a large increase to the pay of Jailors in Indian jails apply with equal force to the Overseer service in the Andamans, and we hope that our suggestions on this point will meet with approval. The following are the grades and salaries that we propose should be adopted:—

Overseers.

1st Grade.—1 appointment on R250 rising to 300 by yearly increments of R10.

2nd Grade.—2 appointments on R175 rising to 225 by increments of R10.

3rd Grade.—3 appointments on R150 rising to 175 by yearly increments of R5.

Assistant Overseers.

1st Grade.—3 appointments on R100 rising to 125 by yearly increments of R5.

2nd Grade.—3 appointments on R80 rising to 90 by yearly increments of R2.

Besides the above expenditure there will usually be a charge of about R50 per mensem for a candidate qualifying in a Central Jail for this service.

We find it difficult to calculate accurately the financial results of our proposals, because it is impossible to give the exact amount of the saving that would result if our various suggestions for reducing money grants to prisoners were carried out. We do not however anticipate any increased expenditure in the cost of the administration as a whole if our proposals to improve the subordinate service are adopted. It is for Colonel Cadell to consider whether any of the present incumbents are qualified either by merit or long service for promotion to the higher grades at once. We would recommend that the Overseers now in the service should rise by annual increments to the pay of the new grades, and not be promoted at once to the maximum pay of their respective grades. With such a well-paid service it should be possible to weed out all those who are unfit or who are suspected of being corrupt.

We are of opinion that the duties and responsibilities of Overseers and Assistant Overseers might with advantage be revised by a Committee of Settlement Officers. It should be possible with such a large increase to their staff to

make these subordinates responsible for more minute details than they can at present attend to. Before making its recommendations the Committee should consult the rules laid down in the Bengal Jail Code for the guidance of Jailors.

23. Convict Officers.—The last point we have to consider in connection with the subject of improved discipline and supervision is the organisation of the staff of convict officials. Petty officers, as they are called, are divided into four grades:—

Jemadars on R8 in charge of stations containing upwards of 100 prisoners.

Tindals on R6, one to every 100 convicts.

Peons on R4, one to every 50 convicts.

Orderlies on R2, one to every 25 convicts.

We have already referred to the necessity of keeping the best petty officers in the grades of Jemadars and Tindals, and so rewarding them as to make it worth their while to prefer the service to getting tickets as self-supporters. We would therefore recommend that such salaries should be fixed for these two grades as will secure the retention in them of competent and useful men. Some officers think that these grades are too highly paid; it is for the local authorities to fix the pay that will in their opinion be sufficient to induce the best convicts in the Settlement to take these posts and serve the rest of their sentences in them.

We find that it is the general opinion that the grade of peon is not required. We propose therefore to abolish it. When this grade is abolished, some alteration will have to be made in section 83 of the Manual.

The orderlies who have the care of 25 men have a heavy and responsible charge, which is made still more difficult by the scattered nature of the extra-mural work which they have to supervise. In our opinion it is at this point that the organisation requires strengthening. To effect this without increasing the number of prisoners to be withdrawn from labour for the work of petty officers, it would be advisable to adopt a plan which has been found most successful in the selection of convict officers in Indian jails. The qualifications required of an efficient petty officer are not ordinarily found in the native convict, and it has after many years of experience been found necessary to begin a petty officer's training for his post long before he is promoted to it. For this purpose a separate grade is formed of ordinary laboring convicts who are called nightwatchmen or candidates, or by the more expressive vernacular term *umedwars*. To this grade are promoted all the most eligible convicts. They are not exempted from any portion of the full task expected of them. They are distinguished by a badge on the sleeve, and are rewarded under the mark system by being able to earn a slightly larger remission of sentence than the ordinary convict. On Sundays they are paraded separately from the rest of the prisoners, and in the order in which they stand for promotion. Neglect of duty is punished by loss of marks, by reduction in the position on the list for promotion, or by reduction to the status of an ordinary prisoner. In this grade a convict usually passes a year or two, and when his turn for promotion arrives the appointment can be made with the certain knowledge that a prisoner having the requisite qualifications has been obtained. We would strongly recommend that such a grade should be organised in the Settlement, and that one *umedwar* should be employed in each gang of 25 men under the orders of the orderly and as his assistant. He might, if it was considered necessary, during the day have independent charge of a portion of the gang, or be detached for duty with two or three prisoners of the gang who are required for work apart. In our opinion the gang unit of 25 men should be night and day under the charge of the same orderly and *umedwar*. At night the *umedwar* would be expected, as he is in Indian jails, to give a watch of two hours, and we think that for the purposes of discipline and maintaining a stricter watch in the barracks, there should always be a watch of two men inside each barrack, usually an *umedwar* and an orderly. When any irregularity has to be checked, two men would act with more confidence than one. The night guarding should begin as laid down in rule 82 of the Manual; the time at present fixed for each watch is three hours, but experience has shown that a watch cannot be prolonged beyond two hours without making it inefficient. Supposing there are a hundred prisoners

in each barraek, there would be four orderlies and four *umedwars* for night duty. This would give four watches of two men each up to 4 A.M. The last watch may however be continued without any great hardship to the opening of the barraek at 5 A. M. If the men on this last watch were changed every night, there would be no hardship in doing the extra hour once in four days. At present all petty officers are allowed to sleep in a part of the barraek which is partitioned off from the rest of the prisoners. It would be better if the orderlies were made to sleep with their gangs. If however this is now likely to be considered too great a hardship, the *umedwar* should be put in charge and must be awakened when a member of his gang commits any breach of rules. The weak point in the present guarding arrangement is the want of some system of controlling the movements of prisoners when they return to barraeks for their meals and before lock-up. A good many escapes take place at these periods of the day, which are chiefly due to prisoners wandering away and then being tempted to abscond by the sight of the jungle. We would recommend that each gang under its own orderly and each sub-division of a gang under an *umedwar* should be kept together at these times. They should be taken in a body to the bathing, feeding, and latrine parades, and no prisoner should under any circumstances be allowed to wander out of the sight of his petty officer. When a prisoner is found out of his file, he and the petty officer of his gang should both be punished. If this suggestion is carried out, we hope to see a large reduction in the number of escapes.

We have already indicated that in lieu of the money gratuity of R2 now allowed to each orderly, a remission of a portion of the time he has to spend in Class 2 should be substituted. What that remission should be we leave to the Superintendent to determine. One important feature of the convict officer system should be the parading of all grades of petty officers and *umedwars* together in the order of their standing in the service outside the barraek on Sunday parades. It is on these occasions that the opportunity should be taken to make appointments and promotions, and also to draw attention to the irregularities that have been committed by petty officers and the punishments that have been awarded to them. We would strongly deprecate the appointment of any habitual thief to these posts. The prospect of a self-supporter's ticket ought to be a sufficient inducement to these characters to behave well.

24. Accounts and office work.—Convict munshis.—We were not able, for want of time, to go thoroughly into the system of records and accounts kept in the District and Divisional offices; but what we saw led us to think that there was some room for improvement. The two most important branches of clerical work are the daily ration accounts of labouring convicts, and the account of monthly payments, whether as allowances or as gratuities, to which convicts become entitled on reaching Class 2 or being appointed to certain offices. These accounts are kept in the vernacular in the Divisional and District offices, and are supported by a file of vernacular "station orders," which give the authority for the transfer of convicts from place to place, their promotion to the paid grades, punishments carrying degradations, and other changes which involve changes in the daily accounts. Each District officer has a vernacular list of convicts serving in the district, and each Divisional officer, subordinate to the District officer, a similar list, and this list, corrected from time to time by the "station orders," with the daily returns from the Station Munshis, forms the basis for the ration and payment accounts. The vernacular used is Urdu in the Persian character, and the Munshis are all convicts. Besides these vernacular accounts, accounts in English are kept up in the District offices and rendered to the Superintendent's office, where they are again checked.

The want of literate assistants to keep these accounts is much complained of, and a convict, whether for life or for a term of years, who knows English or Urdu, at once finds his way into an office and is employed in labour which can hardly be called penal, and affords him many opportunities for mal-practices and for obtaining unauthorised indulgences. Thus, in the Deputy Superintendent's office we found two Munshis and one English writer who were habitual thieves and dacoits. In the 1st Assistant Superintendent's office at Viper the head convict English writer was a Bengali clerk from the Surveyor General's office, who had been transported in November 1888 for ten years for an offence

under section 394, Indian Penal Code. An Armenian term convict sentenced at Rangoon on a third conviction to seven years' transportation was one of the arrivals by the steamer by which we travelled to Port Blair. He was immediately told off for clerical work. We were informed by the Superintendent that the necessity of employing in these offices educated convicts of depraved character leads to frequent attempts at fraud and forgery, and that the convict Munshis are among the prisoners most frequently sent as a punishment to the Viper chain-gang.

It appeared to us that few, if any, of the Settlement officers were able to check the vernacular accounts as written by the Munshis in the Persian character, and that the system of double record in English or vernacular which was found necessary, and which in no degree operates as a real check, was due to this inability.

We think that much improvement in the form of the accounts and much greater facility in checking them (one of the most important duties of the Settlement officers) would result if the Persian character were altogether discarded, and the registers, &c., kept in Urdu written in the Roman character. With this change the necessity of a double set of registers would at once disappear; no second registers in the English language would be necessary. The eye of the District or Divisional officer would travel easily over a set of columns filled in with numbers and figures in the Roman character, and he could check the columns in a title of the time which is now required to go through a Persian account. This change would not only facilitate business, but would also afford a much larger field for the selection of men capable of serving in offices. At present that selection is confined to the few convicts who know English or Urdu. Educated men whose vernacular character is Hindi, Bengali, Gurmukhi, Gujarathi, Marathi, or any of those used in Southern India are at present useless as clerks, because they know neither English nor the Persian character. But the Urdu language is in general colloquial use all over the Settlement, and is even spoken by convicts from Burma, Bombay and Madras. It has been demonstrated by experience elsewhere that when a man has once learnt the art of writing in whatever character, it is a comparatively simple and easy matter to teach him to use the Roman character for writing the vernacular which he speaks. We are convinced that a short period of instruction (which should be carried on during the two years of confinement in jail which we have recommended as the initial stage for all convicts) would be sufficient to qualify men able to read and write their own vernacular to use the English character, and thus to act as Munshis. It would then be possible to get rid of the bad characters whom it is now necessary to employ in offices, because there is no other qualified agency available; and we recommend that arrangements be at once started to begin this system of training.

As regards the registers and accounts themselves, we have asked the Superintendent to supply us with forms of all the registers in current use in the Settlement offices, and Dr. Lethbridge proposes when they are received to have them examined by an expert accustomed to the Bengal jail forms, who will consider if he is able to suggest any improvements or simplifications in them. When he has prepared a revised set of forms, they should be sent to Port Blair, the Bengal expert himself visiting the Settlement and enquiring on the spot into the possibility of introducing them and the practical necessities of the case, and they should then be laid by him before a Committee of the most experienced Settlement officers for consideration and discussion.

The above paragraphs contain the most important recommendations which we have to make. We now proceed to mention some minor points which attracted our attention during our enquiries.

25. Medical aspects of the Settlement.—In Appendix C will be found a memorandum by Dr. Lethbridge on the medical aspects of the Settlement. The last two years have been markedly unhealthy, and it is very desirable that the newly appointed Medical Officer should give special attention to ascertaining the probable causes of the mortality which has unhappily occurred. The death rate has always been highest among the newly arrived and unacclimatized convicts, and this has been conspicuously the case during the years 1887, 1888 and

1889. We trust that the lines of enquiry suggested in the memorandum will lead to improvement in the future

26. Possibility of increasing the number of female convicts.—Among the subjects mentioned in your letter No. 80, dated the 15th January last, on which we are asked to report, is the possibility of increasing the number of female convicts in the Settlement. The Jail Commission (Chapter XXVIII, paragraph 1 of their report) thought that many eligible women under life sentences were detained in Indian jails owing to too great strictness in the application of the rules regarding fitness for transportation. If this is so, it must be because the rules are misunderstood or misapplied. Female term-convicts are not at present allowed to be sent to Port Blair, but for female life-convicts the rules regulating fitness for transportation are, under the provisions of Home Department Circular No. $\frac{10}{770-785}$, dated the 7th October 1887, the same as those applicable to male convicts, that is, they should be deported if they are under 45 years of age and fit for ordinary jail labour (*vide* Home Department Resolution No. $\frac{4}{212-224}$, dated 23rd March 1886).

The only means by which the number of female convicts in the Settlement can be materially increased is in our opinion by permitting the deportation thither of female term-convicts, and we suggest that this should be authorised. It may be objected that our recommendation to this effect is inconsistent with our proposal that male term-convicts should cease to be sent to Port Blair, and that the matter has on various occasions been considered by the Government of India, and the conclusion arrived at that the present restriction on the transportation of female term-convicts should be maintained. To these objections we reply—

(1) that the female jail at South Point is an institution quite different from the labour stations for male convicts in the Settlement. It is a real jail with intramural labour and task work, and is capable of being managed, and in our opinion should be managed, with as much strictness of discipline as any female jail in India. Our objection to the transportation to Port Blair of male term-convicts is that for them transportation is not a sufficiently deterrent punishment compared with their life in Indian jails, and cannot be made so. This argument does not apply to women, who can, and should, be subjected to as strict discipline in the Andamans as in Indian jails. In their case, therefore, term transportation is not open to the objections which attach to it in the case of males. And as it is one of the most urgent necessities of the Settlement that the number of women living in it should be increased, we recommend that female term-convicts should be allowed to be transported to Port Blair.

(2) The second objection, as will be seen by reference to the correspondence, is based upon the inconvenience which is considered likely to result from the presence of free women in the Settlement, who, it is thought, could not be permitted to marry self-supporters who are still convicts. As the female term-convict would be entitled to return to India when her term expired, it was supposed that no permanent addition to the female population available for marriage would result from sending such women to Port Blair.

It is beyond question that the provision of more women as wives for self-supporters is one of the chief needs of the Settlement. Not only does the excessive disproportion of the sexes which exists at present lead, directly or indirectly (by encouraging unnatural vice), to nearly all of the murders and attempts at murder which occur annually, and a large part of the other crime; the impossibility of building up a home and family deters many male convicts from settling in the Andamans who would, if they could get wives, contentedly stay there and add to the productive powers of the Colony.

It appears to us that the difficulties which are anticipated from allowing marriages between convict self-supporters and free or short term women are likely

to prove less in actual practice than was supposed. The great majority of female convicts who have passed through Indian jails have little or no desire to return to their homes. A considerable number of them are of the classes described in the letter from the Government of Bombay, No. 524, dated the 24th January 1884, *viz.*, women, chiefly widows, convicted of infanticide, who are certain to relapse into a life of shame when set free in India after a term of imprisonment. The Bombay Government then suggested that women sentenced for infanticide should have their sentences commuted to transportation for a term, provided that they were actually sent to the Andamans, where, after a period of imprisonment, they would, if widows, have the chance of marrying again, and of commencing life afresh in a new sphere. This recommendation was not accepted by the Government of India on the ground, as stated by the Superintendent, that "to allow female term-convicts to marry male life-convicts would be certain to lead to complications when the former complete their term of imprisonment. Whatever they might agree to before they are sent down, they could not be lawfully detained against their will after the expiration of their sentence." We presume that this refers to such female term-convicts as do not marry. For, if a female term convict became the wife of a self-supporter, her husband would obviously be entitled to prevent her from leaving his society even though her sentence had expired. Port Blair marriages are not made otherwise than according to the personal law of the parties, and are as binding as any other; and no free woman married to a self-supporter convict with her own free will would have the right to leave him because the term of her sentence had expired. Such women as do not marry or take service in the Settlement should be sent back to India when their term expires. The Superintendent has, under section 26 of the Andaman and Nicobars Regulation of 1876, ample powers to secure the removal from the Settlement of a free woman whose presence there is undesirable.

We recommend, therefore, that women sentenced to transportation for seven years and upwards, who are either unmarried or widows, or have been divorced or repudiated by their husbands, and are thus free to marry, should be sent to Port Blair, and that such women should be allowed to marry upon the same conditions as female life-convicts after five years' good conduct in jail.

27. Possibility of increasing the number of habitual offenders transported under Section 75, Indian Penal Code.—If our recommendation that male term-convicts should not, except from Burma, in future be transported to the Andamans is accepted, it may be expected that the number

* Number of term-convicts sent to Port Blair from India in—	Number of term-convicts sent to Port Blair from Burma—
1886-87 . . . 239	417
1887-88 . . . 282	501
1888-89 . . . 280	285
Average . . . 266.7	407.7

of prisoners annually deported to Port Blair will fall off by some 270 persons.*

As the Settlement is most economically managed when the convict population is maintained at its full strength, this falling off will cause a rise in the average cost per prisoner, which should, if possible,

be corrected by adding to the number of life-convicts, and the question arises how this can be effected. We suggest for the consideration of Government that the attention of the judicial authorities in India might with much advantage be drawn to the special appropriateness of a sentence of transportation for life in the case of persons habitually addicted to offences against property (section 75, Indian Penal Code). We have reason to believe that many Indian jails are at present crowded with such habitual offenders, especially in the neighbourhood of the chief centres of population. We have before us lists of such habitual criminals from the Central Jails in Bengal, which show that large numbers of persons, still in the prime of life and presumably fit subjects for transportation, spend their existence between the Court-house and the Jail. They are rarely at large for more than a few weeks before they find their way back to prison, and it is clear that confinement in our jails has no deterrent effect upon them whatever. The sentences passed upon them, possibly for want of knowledge of their previous career, are in no way graduated to the character which their repeated offences shew to be theirs. We constantly find that a criminal, who has just been released from a long term of imprisonment, is on the next occasion when he is convicted sentenced to a short one, although section

75 of the Penal Code recognizes that such incorrigible offenders should be punished with the utmost rigour of the law.

To show that we are not exaggerating, we quote a few instances drawn from several hundreds of which we have received particulars.

Shekh Mahbub alias Chingi—Now in the Presidency Jail, Calcutta (No. 5974). Present age 35.

1st conviction	. 2nd October 1869, for theft	. 6 months.
2nd "	. 3rd January 1871 "	. 2 days.
3rd "	. 24th February 1871 "	. 20 stripes and 3 months.
4th "	. 18th December 1871 "	. 6 months.
5th "	. 30th August 1872 "	. 6 months.
6th "	. 24th December 1873 "	. 6 months.
7th "	. 4th July 1874 "	. 6 months.
8th "	. 13th July 1875 "	. 3 years.
9th "	. 30th November 1878 "	. 7 years.
10th "	. 20th September 1886 "	. 1 year 6 months.
11th "	. 14th June 1889 "	. 2 years.

Tinkauri Shekh alias Ghafur Ali—Presidency Jail No. 7743. Present age 28.

1st conviction	. 16th August 1872, theft in a building	. 6 months.
2nd "	. 6th Sept. 1873 "	. 15 days.
3rd "	. 4th Dec. 1873 "	. 10 stripes and 7 months.
4th "	. 18th May 1874 "	. 1 month.
5th "	. 3rd Nov. 1874 "	. 6 months.
6th "	. 23rd October 1875, abetment of theft in a building.	. 1 year.
7th "	. 28th Dec. 1877, theft in a building	. 2 years and 25 stripes.
8th "	. 21st January 1880 "	. 2 years and 25 stripes.
9th "	. 5th Dec. 1882 "	. 6 years.
10th "	. 15th May 1889 "	. 2 years.

Nidhu Ram Madak—Presidency Jail No. 7888. Present age 40.

1st conviction	. 5th Nov. 1867, theft	. 1 month.
2nd "	. 22nd August 1868 "	. 6 months.
3rd "	. 22nd June 1869 "	. 6 "
4th "	. 26th Feb. 1870, loitering with intent	. 3 "
5th "	. 23rd June 1870, theft	. 6 "
6th "	. 26th June 1872, sections 292 and 294, I. P. C.	. 3 days.
7th "	. 9th Sept. 1872, theft	. 3 months.
8th "	. 9th April 1873 "	. 6 months.
9th "	. 17th Dec. 1873, loitering with intent	. 3 months.
10th "	. 21st March 1876, theft	. 7 years.
11th "	. 17th June 1889, "	. 10 years.

The above are selections from a list of 90 prisoners now in the Presidency Jail, every one of whom has been convicted at least four times of offences coming under Chapter XVII of the Indian Penal Code and punishable with

imprisonment of three years or upwards. The great majority of these prisoners are under 40 years of age, and have practically spent the whole of their life since reaching manhood, and many almost from childhood, in jail.

The following are from the Alipore Jail:—

Kina Rám Bairági—Jail No. 5767. Present age 41.

1st conviction	17th March 1873, theft in a building.	1 month.
2nd "	8th August 1873 " "	2 years.
3rd "	2nd May 1877 " "	2 years and 15 stripes.
4th "	26th June 1880 " "	2 years.
5th "	18th May 1886 " "	1 month.
6th "	1st Sept. 1887 " "	7 years.

Pánuhu Jogi—Jail No. 93. Present age 36.

1st conviction	8th May 1876, theft in a building.	9 months.
2nd "	11th April 1878 " "	18 months.
3rd "	25th March 1880 " "	2 years.
4th "	26th June 1882, bad livelihood	1 year.
5th "	23rd Sept. 1884 " "	3 years.
6th "	24th August 1889, theft in a building.	5 years.

Guláb, alias Gulám, alias Abdúl—Jail No. 9429. Present age 42.

1st conviction	22nd Dec. 1873, dishonestly receiving stolen property	2 years.
2nd "	4th October 1877, theft as a servant	2 years and fine R6.
3rd "	26th August 1880, theft in a building.	2 years and 25 stripes.
4th "	28th Nov. 1884, receiving stolen property	4 years.
5th "	12th February 1885, lurking house trespass by night	2 years.

Ram Kristo Dás—Jail No. 8199. Present age 35.

1st conviction	7th June 1875, theft	3 months.
2nd "	21st March 1877, house-breaking	1 year.
3rd "	6th July 1878 " "	18 months.
4th "	2nd Aug. 1880, theft in a building.	2 years and fine R20.
5th "	4th April 1883, house-breaking	5 years.
6th "	18th Sept. 1883, theft in a building.	7 years.

There are over a hundred such habitual criminals in the Alipore Jail.

The following are from the Buxar Central Jail. The particulars of the offences have not been given by the Superintendent, but they are all under Chapter XVII of the Indian Penal Code. The age of the convicts is also not stated:—

Dukhi Dusád—Jail No. 926 B.

1st conviction	19th January 1873	6 months.
2nd "	20th July 1873	20 stripes.
3rd "	7th Aug. " "	6 months.
4th "	26th Feb. 1874	6 months.
5th "	4th June 1875	6 months.
6th "	24th July 1876	2 years.
7th "	8th July 1884	6 years.

Syed Jân—Jail No. 1243 B.

1st conviction	. 29th July 1879	. . .	1 year.
2nd "	. 8th July 1881	. . .	6 months.
3rd "	. 20th May 1882	. . .	20 stripes.
4th "	. 20th July 1882	. . .	3 years.
5th "	. 11th January 1886	. . .	5 years.

Bhutan Dhannk—Jail No. 1892 B.

1st conviction	. 22nd May 1876	. . .	1 month.
2nd "	. 19th February 1879	. . .	6 months.
3rd "	. 10th June 1882	. . .	2 years and 30 stripes.
4th "	. 8th September 1884	. . .	18 months.
5th "	. 26th January 1887	. . .	4 years.

Sewadn Kesira—Jail No. 3684 B.

1st conviction	. 12th July 1865	. . .	6 months.
2nd "	. 11th March 1873	. . .	5 stripes.
3rd "	. 11th March 1873	. . .	10 stripes.
4th "	. 27th December 1873	. . .	15 stripes.
5th "	. 9th December 1875	. . .	6 months.
6th "	. 6th December 1881	. . .	5 years.
7th "	. 18th December 1882	. . .	6 months.
8th "	. 22nd April 1887	. . .	1 year.
9th "	. 1st June 1888	. . .	3 years.

The following are from the Dacca Central Jail:—

Rajmohan De—Jail No. 4619 B.

1st conviction	. 25th May 1879	. . .	3 months.
2nd "	. 30th June 1883	. . .	14 stripes.
3rd "	. 30th June 1883	. . .	1 month.
4th "	. 7th September 1883	. . .	2½ months and 20 stripes.
5th "	. 9th November 1886	. . .	1 month.
6th "	. 15th July 1889	. . .	3 months.
7th "	. 6th August 1889	. . .	2 years.

Ilâki-bakhsh—Jail No. 4792 B.

1st conviction	. 9th January 1880	. . .	25 stripes.
2nd "	. 5th June 1880	. . .	3 months.
3rd "	. 5th February 1881	. . .	1 month.
4th "	. 8th May 1883	. . .	8 months.
5th "	. 22nd May 1884	. . .	1 year.
6th "	. 8th June 1887	. . .	2 years.
7th "	. 16th September 1889	. . .	5 years.

Ganesh Halwâi—Jail No. 4800 B.

1st conviction	. 27th November 1874	. . .	3 months.
2nd "	. 20th April 1876	. . .	4 months.
3rd "	. 13th August 1877	. . .	3 months and 15 stripes.
4th "	. 22nd April 1878	. . .	1 year.
5th "	. 1st November 1886	. . .	2 years.
6th "	. 30th August 1888	. . .	2½ years.

The above examples might be multiplied indefinitely from the jails of Bengal, and we submit that they prove that sufficient use is not made of the provisions of section 75 of the Indian Penal Code. This may perhaps be due to the fact that the prosecuting officers do not pointedly bring before the sentencing Courts the antecedents of the accused, or that the advantages of transportation as a reformatory form of punishment are not understood. We have

explained at the beginning of this report how highly we rate the life and discipline at Port Blair as a reformatory agency, and it appears to us that there is no class of Indian criminals to which a life sentence of transportation is, both for the criminal's own sake and for that of society, more suitable. The successive sentences passed in jails show that prison life in India has no terrors for these persons; and their career of crime marks them out as incorrigible pests of society, against whom the community is entitled to protection by their permanent removal from its midst. In the Andamans they would be given a fresh chance in an entirely new sphere, where good conduct would be rewarded by the means of honest livelihood, with a good climate, a fertile soil and a ready market for the fruits of their labour.

28. Deficiencies in information now sent with convicts from India.—We noticed great deficiencies in the documents transmitted with the convicts from India. The importance of correct information as to a prisoner's general character and antecedents when he is admitted into the Settlement is so great that we think that the attention of Local Governments and Administrations should be called to the instructions which already exist on the subject, and that those instructions should be in some respects supplemented.

The papers which should accompany each convict transported are the following:—

(a) His warrant.

(b) A descriptive roll in the form laid down in Home Department Circular No. 928—938, dated the 1st June 1870; in preparing this roll, care and detail in entering descriptive marks were enjoined in Home Department letter No. 4—329-33, dated 6th December 1873.

(c) A statement of the convict's general character and antecedents, and a detailed account of his crime, prescribed in Home Department letter No. 2047—55, dated 7th November 1872.

In going over the papers received with the batch of convicts who accompanied us to Port Blair in January, we found reason to doubt whether these instructions are known to the authorities in Native States whose convicts are deported to the Andamans, as few, if any, of such convicts had rolls giving the required particulars. But from all provinces there was a great lack of information in the entries made in the third statement. The "detailed description of the crime and its circumstances" was most meagre, and evidently in many cases filled up by a native imperfectly acquainted with English. The column headed "Previous history of the prisoner, his general character and mode of life" was often left altogether blank. In the case of Madras prisoners, a useful practice had been adopted of sending with the warrant a copy of the judgment of the sentencing court. We think that this should be prescribed for all provinces, and we suggest that the detailed description of the crime should be furnished by the Magistrate who committed the case to the sessions, while the "Previous history" column should be filled in by the District Superintendent of Police. It will be observed that the entries in the descriptive roll required under (b), and those in the crime roll under (c) overlap. The important columns of the crime roll are the three last, and we suggest that the others, except those shewing the prisoner's name and jail register number, should be omitted. In the descriptive roll, column 18, headed "Previous convictions," should be filled in with the section of the Indian Penal Code or other law, the date of sentence, and the nature of the punishment suffered. We attach a copy of the descriptive and crime rolls as we think they should stand in future [see Appendices H (1) and (2).]

29. History tickets as in Indian Jails should be adopted for convicts.—After many discussions with Colonel Cadell and the other officers of the Settlement on the subject of maintaining a history ticket for each convict in transportation, we have arrived at the conclusion that such a record is absolutely necessary for the proper management of convicts in Port Blair. The recommendation of the Jail Committee on this subject will be found at pages 132 and 133 of their Report. Colonel Cadell is afraid that the clerical work

involved in keeping up these tickets will be very considerable and beyond the means of his limited literate staff, while he thinks that the tickets will get into confusion owing to the ignorance of the convict officers in charge of them. He has, however, promised to give the plan a trial among the female convicts at South Point, the Viper Jail prisoners, and the convicts employed in the tea gardens. We are satisfied that, if this experiment is thoroughly carried out, the advantages of having a history ticket for each prisoner will be demonstrated, and that the difficulties apprehended will be found to disappear. It has already been found necessary to maintain a history register for the convicts. Since, however, this register is not available at all times when questions arise regarding individual prisoners, it is not of as much use as a history ticket would be, which could be produced and consulted on the spot, and on which the orders and remarks of the Settlement or Medical Officer could be at once recorded. The ticket would in time become a very valuable medical history sheet, shewing the convict's weight, health, and employment during his residence at Port Blair. The want of such a history is greatly felt by Medical Officers in the selection of prisoners for special employment, and in determining on their treatment when admitted to hospital or to the convalescent gang. In Indian jails it is not found necessary to maintain a copy of the history ticket in a regular register. Considering, however, the length of the sentences that have to be passed in Port Blair, and the damage that is likely to be done to the tickets by the damp climate, we are of opinion that such a register will be found a necessity. If a prisoner loses or damages his ticket and requires a new one, it can be supplied on the payment of a small fine either in money, if he is a second or first class convict, or in food, which could be recorded as a punishment by reduced diet for one or two days. To make history tickets last as long as possible it is essential that they should be of smooth thin card-board and be always kept in watertight tin cases, which should be carried by the petty officers and *umedicars* accompanying the prisoners to their work. The prisoner will only be allowed to have his ticket when he desires to complain or make a petition to the Settlement Officer or Medical Officer, or when he is paraded with his kit for Sunday inspection. All the entries made in a prisoner's ticket during his residence in Indian jails should be carefully copied into the Port Blair ticket.

30. Wooden neck tickets.—It is the practice in the Settlement to give each prisoner a tin token shewing his register number. These are similar to the tokens which were formerly in use in Indian jails, and which had to be discarded because they were constantly being lost and left behind in the bedding. It is essential that each prisoner, especially of the lower grades, should be provided with a ticket which he can neither lose nor hide. Such a ticket is now in use in nearly every province in India. The Jail Committee have devoted a special chapter to this subject, which will be found at page 87 of their Report. We recommend that these wooden neck tickets be introduced. They are already worn for many months by transportation prisoners in jails, and are therefore no hardship to men accustomed to them. Petty officers and convicts deserving the indulgence should not be expected to wear them round the neck, but should always have them ready for reference.

31. Suggestions for economy in the cash expenditure of the Settlement.—The suggestions we next have to offer refer to the measures which we recommend should be considered with the view of lessening the cost of the Settlement to Government.

I. Reduction possible in cattle farms.—We have already made certain recommendations in regard to the issue of locally-grown Indian corn for the diet of convicts which will result in a saving of expenditure calculated roughly at Rs40,000. Since the whole of the Indian corn now grown in the Settlement is used for feeding Government cattle, it is necessary to consider the question of the food required for live stock in detail. From figures supplied by the Commissariat Officer we find that the following quantities of gram, paddy, and Indian corn were expended in 1888 for the feeding of Government stock :—

Imported from Calcutta	{	1st quality gram	1,625 maunds,	at a cost of Rs5,211
		2nd do.	12,125 ,,	
Purchased locally	{	Paddy	2,330 ,,	Rs2,984
		Indian corn	7,900 ,,	Rs10,128

The total quantity of the year was 23,980 maunds and the total cost Rs54,682. These figures, we think, justify us in recommending that the subject should receive special attention, and that an enquiry should be made to ascertain (1) the necessity of maintaining such a large number of Government animals, and (2) the advisability of growing or importing cheaper grains for their food.

It is generally allowed by local officers of experience that Government cattle farms are no longer necessary. The supply of draught bullocks, beef and milk in the Settlement is now sufficient for all purposes, and meat and milk can be purchased at reasonable rates from the self-supporters and free settlers. Unfortunately the Government has on its hands a large number of cattle brought over from Camorta, for which no use can be found and which are unsaleable in Port Blair. The question of selling these useless animals to butchers in Calcutta should be considered. The Asiatic Steam Navigation Company might, in consideration of the large numbers to be shipped, reduce their terms for freight. It may also be possible to reduce the number of bullocks now fed on grain by examining the requirements of the Settlement as regards draught cattle and fixing on a maximum number to be maintained by the Commissariat Department. It may be found cheaper to hire bullocks and carts from self-supporters on special occasions when there is a demand for carriage.

II. Allowance of mutton now made to Madras troops might be discontinued.—In 1865, when the question of the food-supply of Port Blair was very different from what it is now, and it was difficult to obtain meat for the native troops, Government sanctioned an arrangement by which the sepoys of the Native Army could purchase once a week 1lb of mutton per man for $2\frac{1}{2}$ annas a pound. This indulgence was subsequently extended to the Police. These orders have led to a larger importation of sheep and a corresponding increase of expenditure which it seems to us there is no necessity to continue. The supply of poultry and goats is now plentiful, and as a fact the Police prefer buying their own meat locally to getting it from the Commissariat. Under these circumstances, we strongly recommend that the issue of mutton to the Madras troops should be stopped, or that it should only be sold at cost price. If this recommendation were carried out, there would be a large saving in the importation of gram. Now that Port Blair is in direct communication with Madras as well as Calcutta, the Commissariat Officer is of opinion that a smaller stock of sheep might be kept in the Settlement, which would result in a still further reduction in feeding charges. Unfortunately all attempts to breed the better class of sheep in the Settlement have failed. It is just possible that the inferior breed which is found on the Coast of Orissa and Ganjam might succeed here, as they appear to stand a damp climate.

III. Kulthi from Madras might be substituted for gram from Bengal.—The next point which should be considered in connection with this subject is the kind and quality of the grain that should be used for feeding the live stock. At present the gram imported costs Rs2-3-5 and Rs2-1-4 a maund in Calcutta, and the Indian corn and paddy are obtained from the self-supporters at Rs1-4 per maund. Kulthi, on which most animals are fed in Madras, can be purchased for Rs1-8 a maund in Madras. It should therefore be possible to arrange for a cheaper grain to take the place of the gram now imported.

IV. Ghee might be produced locally.—The price of milk in the Settlement is cheaper than it is in Bengal, and yet every ounce of ghee issued for rations by the Commissariat is imported from Calcutta. The quality, moreover, is inferior to what could be produced locally, if an attempt were made to manufacture ghee in Port Blair. To start such an industry it would be necessary for Government to demonstrate to the self-supporters that it was a paying one, and this could be easily done by making ghee at one of the stations where milk can be had at cheap rates and in sufficient quantity. A cream-extractor might be found a convenient machine for the purpose.

V. Kerosine Oil should be substituted for Castor Oil in lamps used in Barracks.—We would next suggest that kerosine oil should be used for burning in the place of castor oil. The lighting of the barracks and the lamps used for burning castor oil appear to us susceptible of much improvement.

With proper kerosine lamps it should be possible to obtain a much better light with a smaller number of lamps, and at the same time to show a large annual saving in the cost of oil. The total number of lamps for which oil is supplied every night is 610; the quantity of castor oil issued is 122½ per diem. This gives an annual consumption of 541½ maunds of castor oil at R13-5-4 a maund, or a total of R7,220. Kerosine oil sells at Port Blair at only R8-12 per maund. Even if oil imported from Calcutta were used, it is calculated that there would be a saving of R2,482 annually. If, on the other hand, kerosine oil were imported direct from America, by arranging that a ship which was going to Calcutta or Rangoon should land the oil at Port Blair, it could be obtained at a cheaper rate, and all the difficulties now experienced in having it carried by steamer* would be obviated. If kerosine lamps were used, it would be possible to reduce the number of lamps in the barracks at night. The pattern of lamps used in the Rangoon Jail is an excellent one. If this is found too expensive, Hinks's Patent Hurricane lanterns with wind protectors made by Messrs. T. E. Thomson and Company may be tried. We were disposed at first to consider that there would be some danger of fire from the use of kerosine in wooden barracks, but the experience gained in its use in the Burma jails shows that there is no risk if the lamps are kept out of the reach of the prisoners at night. There are two methods for removing lamps to a sufficient height: one is to have a rope and pulley which can be adjusted from outside the barrack; the other is to place the lamp in position by means of an iron crook on a rod. The crook is then removed outside and is passed in when it is wanted to re-light a lamp which has blown out. As an additional precaution there should be a heap of dry earth in a basket under each lamp which could be used in extinguishing any fire caused by the accidental breakage of a lamp. Kerosine lamps have been used for the last ten years in Bengal jails, and no accident has been reported as due to them.

VI. Economy is possible in the supply of clothing.—Some economy, we think, is possible in regard to the supply of clothing. Chapter X of the Manual contains the rules on this subject. In these rules no distinction is made between the clothing allowed to prisoners on extramural labour and that given to those who work under shelter. The difference in wear and tear is, however, so considerable that there seems to us to be some room for a modification in the scale of clothing to be allowed to prisoners employed in these two kinds of labour.

At a Sunday parade of prisoners' clothing on Ross we found that convicts who were employed under shelter had saved a good many suits of their old clothing which were still quite serviceable. One Madras prisoner who had been in Port Blair for 21 months had five suits of good cotton clothing in his possession. Here then we have three suits for which the Government has paid, but which are of no practical use to the prisoner except perhaps for the purposes of barter. We believe that there is room for economy under this head if some system could be devised for making the prisoner take some personal interest in the preservation of his clothing. In Chapter XV of their Report the Prison Committee have dealt at considerable length with this subject, and their remarks may be consulted. It seems to us possible, if life-convicts only are in future sent to Port Blair, to lay down that during the first ten years a certain number of suits shall be issued to each prisoner. Any number of suits actually issued beyond this fixed allowance would entail the postponement of the self-supporting ticket for a definite time for each suit. On the other hand, any less number of suits issued than the regulation allowance might shorten the period by a corresponding amount. The history registers now kept in the District Offices will be convenient records for these issues of clothing. The executive and medical officers would in their inspections see that each prisoner had sufficient clothing. Special provision would have to be made for prisoners on extramural work. Another possible means of effecting economy in this matter would be, when a prisoner is found to have sufficient clothing to last him for another six months, to give him half the value of a new suit in cash, the other half being the saving to Government on the transaction.

* The Superintendent states that at present only 50 cases of kerosine oil are allowed to be carried by the steamer when it is used for conveyance of passengers.

It might be possible to import the paddy in bulk and so save the charge for gunny bags. It is well known that whereas a year's supply of paddy can be purchased in the cheapest season and stored without risk of deteriorating, this is not possible with rice in a damp climate without considerable danger of its becoming mildewed. The advantage, therefore, of being able to purchase paddy in the cheap season is in itself a great saving, apart from the question whether it would pay to husk it. We believe that it would pay, and a mill would further be of great use in husking locally-grown paddy which can be purchased at R1-4-0 per maund. The engine to work the mill would only be required for a few days in the year, but it might be so placed on Chatham or Ross as to be useful for other purposes when not wanted for husking paddy. In 1888-89, 46,387 maunds of rice were imported; the Calcutta cost was R1,03,778, while the value of bags and freight brought the total cost to R1,49,747. The amount of paddy purchased from self-supporters was 2,321½ maunds. Roughly speaking, therefore, the mill would be required to produce about 50,000 maunds of cleaned rice annually.

32. Suggestions for economy in distributing convicts for labour.—

Next to economy in the expenditure of money the question of economy in the employment of convict labour is the most important one calling for consideration in the Settlement. Many necessary works have to be postponed for want of labour. With the abolition of term transportation, the strain which is already felt in maintaining the progress of the Settlement will become more severe and will require special measures to meet the difficulty. We are aware that about September in every year the Superintendent, after consulting the officers under him, settles the programme of work for the dry season when the labour is most wanted, and that the labour distribution is constantly watched by means of returns showing the employment of convicts in the different stations. The following suggestions for still further increasing the control over the employment of convict labour are offered for consideration:—

- (1) That the full convict labour force, or as much of it as possible, should by degrees be concentrated in the Northern Division.
- (2) That the Southern Division should be gradually given over to free settlers and self-supporters.
- (3) That there should be a monthly or quarterly Committee of all Settlement Officers under the presidency of the Deputy Superintendent, who should bring forward their requests and suggestions regarding the disposition of convict labour, and that the Committee should then decide on the recommendations they have to make for the consideration of the Superintendent. It is hoped that by some such arrangement, the tendency which exists for each officer to consider his requirements the most urgent will be checked, and details settled on the broad basis of what is best for the Settlement. On receiving the report the Superintendent would issue his final orders as to the programme to be observed until the next meeting.
- (4) Turning now to details in which convict labour could be saved, the most important appears to us to be the employment of convicts in boats. Over 700 convicts are regularly employed on boat work. We agree with Mr. Tuson in thinking "that if two steam launches were obtained, with accommodation for officers and subordinates, to run frequently between Ross Island and Viper, calling at all the different jetties on the way, most of the dak-boats and office-boats could be done away with, thus effecting a saving in men and boats and gear. A few small canoes for running up creeks would also be necessary." Knowing as we do that the boat's crews now allowed to officers are, when not employed in rowing, utilized as punkah-pullers and water-bearers, gardeners, &c., we would advocate the allowance of, say, four convicts for each District Officer and three for each Divisional Officer for such other duties apart from rowing as the boat's crews now undertake. This, while reducing the number of prisoners withdrawn

from general labour, would also go some way to solve the difficulty as regards the employment of life-convicts in boats.

- (5) The preparation of wool by machinery for spinning would set free the men now employed in bowing wool on Viper.
- (6) If term female convicts were sent to Port Blair, all the men now employed in cloth-weaving would be available for other work.
- (7) The washing of their own clothes by convicts would set free the dhobies now exclusively employed on this work.
- (8) We hope to see a large addition to the working gangs from the better and earlier treatment of wounds and sores.

33. Most remunerative employment for convict labour.—The following observations have reference to the directions in which it appears possible to make the employment of convict labour most profitable. It must always be remembered that a very large proportion of the convict force must be devoted to the maintenance of the Settlement as a self-supporting community. The convicts of the first class settled in villages are mainly agriculturists who live off the produce of their fields and yield a surplus of food stuffs, which it may be possible to increase to some extent, but which can hardly reach any considerable figure, for the general use of the Settlement. Of the labouring convicts of the second and third classes, the service of the convict establishments, labour in boats, the collection of firewood for the steam engines and launches, the growing of vegetables, the catching of fish, and other like occupations, absorb a very large proportion. Many more are engaged in road-making (almost the only possible out-door work during the rainy season), the making of bricks and tiles for building (which is always going on as working stations are shifted from one point to another), and the reclamation of land for cultivation, either in such inland tracts as Jarawakhari* or in the mangrove swamps which line the tidal creeks characteristic of the Islands. None of these occupations bring in any direct return in money to set against the heavy outlay entailed by the maintenance of the expensive Settlement establishments and the necessity for the importation of food stuffs for the convicts, troops, and police.

The natural resources of the Settlement are not great. The chief of them is the timber supply yielded by the Forests, and the exploitation of this is the industry which one would expect to take the first rank in remunerative value among convict occupations. Next to this, but rather as a resource which is likely to develop more in the future, we would place the cocoanut plantations which have been made wherever reclamation has been carried out. The third promising industry, which appears likely to prove a great success, is the cultivation of tea.

We think that the Settlement is entitled to be treated, as jails in India are treated, as the appropriate source of supply for Government Departments in need of those articles which it is able to produce, and that something might be done, by more systematic organisation of its industries, to adapt its resources to the wants of the consuming departments. It has direct communication by sea with Calcutta, Rangoon, and Madras, and the Government establishments in all these centres should be its natural customers. Unfortunately the trade with Port Blair is at present so insignificant that freights run very high, and its productions are thus handicapped in the market; but even with this drawback, the Settlement should be able to produce some money return to set against the cash expenditure necessary for its maintenance.

34. Working of the Forests in Port Blair.—Time did not permit of our going in detail into the management of the Forests, but it may be worth while to set down the impressions which we gathered in regard to the timber and wood supply in the course of our visits to different parts of the Settlement. A great portion of the Southern District has now been completely cleared of trees, and the felling has here in many places been carried out without due regard to the needs of the villagers in respect of timber for building and firewood. This was done, however, several years ago by the orders of officers not now in the Settlement, and the present Superintendent is fully alive to the necessity of restricting fellings in the neighbourhood of villages in future. We

* Vide entry in Appendix A under the 30th January 1890.

would recommend the demarcation and allotment without delay of definite areas in the Southern District to be permanently maintained as forests to meet the wants of the inhabitants, and that wherever new self-supporter villages are established, such areas should, at the same time, be set apart in the vicinity for their use.

The working of timber for export and sale in the immediate neighbourhood of the harbour has almost ceased, except in the West, where some is being brought out from the new clearings in the Jarawakháři Valley. Nearly all the *padauk* in the neighbourhood of Port Blair has been cut out, and the forest gangs were working at the time of our visit at the distant stations of Rangachang in the Southern District, about 10 miles south of Ross, and Pirij or Shoal Bay in the Northern District, about the same distance to the North. We were unable to visit these points. Their remoteness from the settled tracts however shows that the time has now come to consider a systematic plan of operations by which the timber resources of the Settlement may be most judiciously worked, with due regard both to the permanency of the supply and the concentration of the labour force under proper supervision.

Another question which seems pressing is the selection and maintenance of areas for the supply of firewood for the various steam engines and launches, the Government bakery, the salt works, and other like purposes. A large part of the labour force is now employed on the collection of fuel, and the source which has hitherto been almost exclusively worked is the mangrove forests which cover the swamps in the course of being brought under reclamation. But this source is not inexhaustible; nearly all the available land in the neighbourhood of the harbour has already been worked out, except the forests bordering on Brigade Creek. Before long these too will begin to fail, and the supply of firewood will become a difficulty. Here also it seems to us that the time has come—especially in view of the probability of further demands for steam engines and launches which we think should be obtained—for setting apart definite and well-considered areas for the supply of firewood at not too great a distance from head-quarters.

The Forest Officer was employing at the time of our visit about 300 labouring convicts in the felling and extraction of timber (exclusive of 90 employed in the Chatham Saw Mills), and stated that he could utilize 50 more at once, and between 100 and 150 more permanently later on. It was not, however, found possible to meet his demands. Considering the importance of the timber work from a financial point of view,* it appears to us that every effort should be made to find labour for its requirements, even if it were necessary to contract the supply for other less profitable forms of industry.

It was suggested to us that some economy of the timber resources of the Settlement might be effected, and waste avoided, if measures were taken in advance to fix upon the site of new forest clearings to be undertaken (such as those in the Jarawakháři Valley), and the Forest Department were allowed, before felling for cultivation commenced, to extract the valuable timber. At Anniekhet we saw much fine timber which we fear will never reach a market, but rot or be burnt where it lies, but which might perhaps have been utilized if the road which has now been made to the new clearing had been taken in hand earlier and used to admit of the timber being extracted. The same was apparently the case at the villages of Cadellganj, Tusonabad and Hobdaypur lower down the valley, which was formerly throughout heavily timbered.

35. Trade in converted timber, furniture, &c.—Turning now to the utilization of the wood brought out from the forests, it appeared to us that there was great scope for the development of a profitable industry both in dressing and sawing timber in the rough and in the manufacture of furniture and other articles of wood. The Chatham Saw-Mills are now the main centre where timber is converted; there is a small engine, said to be capable of working only one saw bench, at Gararcharama, and pits for hand-sawing at Navy Bay. The latter two, however, we understand, prepare timber only for local use. The planks turned out by the Chatham Mill meet with a ready sale, and there appears to be room for considerable expansion in the demand if a new and more powerful engine, with more saw benches, were supplied. The present engine

* It was stated that the Department was likely to yield a net profit of Rs61,000 during the year 1889-90.

and boilers date from 1874, and are nearly worn out. It would, we submit, be profitable to renew them and to extend the operations of the department. We are not sure that Chatham Island is the most convenient site for large conversion operations; but it will perhaps be difficult to select a better one, and it has advantages in connection with the scheme proposed by us for intra-mural labour during the first two years of a convict's life at Port Blair.

Next comes the carpentry industry, and here we think that there is great room for the development of a profitable trade. The Burmese convicts are, as is well known, excellent carpenters almost by nature. Nothing could be better than some of the work we saw turned out at the workshops both at Aberdeen and Bamboo Flat (the head-quarters of the Artificer Corps in the Southern and Northern Districts respectively). As yet there is little sale outside the Settlement for the articles produced, but we cannot doubt that if they were better known they would be in great demand. Dr. Lethbridge is ready to make arrangements for selling furniture, &c., from Port Blair in Calcutta at the show rooms of the Alipore Jail, if a clerk and chaprassio are allowed to keep the accounts; and we hope that the Superintendent will be able to avail himself of this offer, and to send a steady supply of furniture, carved work, and other articles likely to sell well to the Calcutta Depot.

It is for the consuming departments of Government to specify what kinds of wood-work they would be prepared to take if it could be produced at Port Blair. We have not the information before us which would enable us to make recommendations on the subject. But it has been suggested that the railways might be supplied with the parts of trucks and waggons ready shaped, to be put together on arrival in India; that the Marine Department might have boats and lighters built at Port Blair, where several excellent specimens of such craft have already been built for the use of the Settlement; and that Government buildings and offices in general might be supplied with doors and windows on a standard plan, and with furniture—chairs, tables, and almira's. We would recommend that the Superintendent should, after considering how far he is able to organise his workshops to supply a steady demand, place himself in communication with the consuming departments in Calcutta, Madras, and Rangoon with the view of ascertaining what their requirements are and how far he can meet them. Besides these directions where paying work might be obtained, there will probably always be a good demand from the public for the very artistic carved work of the Burmese convicts, and steps should be taken to procure good patterns from Burma and India.

36. Cocoanuts and the coir industry.—There are now about 130,000 cocoanut trees at Port Blair, and nearly all the swamp reclamations made during recent years have been planted with them. Much of these plantations has not yet come into bearing, and some of the trees planted on poor hill-side soil have disappointed the expectations formed of their produce. We saw a large garden at Haddo where several hundred mature cocoanut trees had hardly a single fruit-bearer among them. There can, however, be no doubt that in a few years the number of cocoanuts produced at Port Blair will be very large indeed. We hope, too, that when the present lease under which the Cocos Islands are held by Mr. Sherlock Hare expires, the Government will on resuming possession have the cocoanut crop on these Islands worked, as it was in former years, by convicts from Port Blair. The coir and cocoanut oil industry will then become one of much importance, and Government Departments should take from Port Blair the coir matting and rope, and the cocoanut oil they require.

We have observed mention in the newspapers of a new process by which good butter is said to be capable of being manufactured from cocoanut oil. It might be worth while to enquire further regarding this process, with a view to an attempt being made to work it at Port Blair. If the butter produced is, as represented, really good and free from the peculiar flavour of the nut, it would not only take the place of the ghee which has now to be imported for the dietary of the convicts, but might also be supplied to the British troops at Port Blair and in Burma.

37. The tea industry.—The tea gardens at Navy Bay and Goplakabang, under the able supervision of Mr. A. J. King, are a great success. The system on

which they are worked, the gardens being debited with the cost of the convict labour supplied at a fixed sum per head, and the manager being allowed commission only on the net profits of the gardens after deduction of the outlay including the charge for labour, leads to great economy in working and the exaction of full tasks, which is a great merit in a convict settlement. It is said that on this account work in the gardens is less popular among the convicts than other occupations which do not admit of being so strictly tasked. The tea produced is excellent, and as further experience is gained the system of cultivation will no doubt receive such modifications as are called for by the nature of the climate and soil, which appeared to us to present much analogy to the conditions prevailing in Ceylon. It is well known that in that island plucking goes on nearly all the year round, and the rain which fell during our stay at Port Blair in January brought out a flush which was at once taken advantage of. The garden at Navy Bay does not appear to admit of much extension, but we suggest that as much suitable land in the neighbourhood as is available should be put under tea. Some of the older bushes, grown from hybrid seed and approximating too closely to the China type, might we think with advantage be replaced by pure Assam tea, grown from the indigenous seed obtained from Assam and Manipur which is now used in all new extensions. The branch garden at Goplakabang has a large area of apparently suitable land in its neighbourhood, which should, we suggest, be cleared and planted as soon as it is found possible to place labour for working it at the disposal of Mr. King and his Assistant Mr. Barrow. The low lands here which have been put under tea seemed to us to require deeper drainage. In Assam, and especially in Sylhet and Cachar, exceedingly heavy crops of tea have been taken off swamp-land through which deep drains, from 6 to 8 feet in depth, have been cut. We saw some rather steep hill-side land being prepared for tea at Goplakabang. In the Indian tea districts such land is found, owing to the denudation of the soil by the rains, gradually to lose its productiveness, and hill-sides have been abandoned for flat land wherever the latter is available.

It appeared to us that there was some scope for the introduction into the tea houses of improved labour-saving apparatus for rolling, withering, and sifting the tea. The present system of open fires leads to a great expenditure of charcoal, much of which might probably be saved if the latest appliances, now in use in the Indian tea districts, were adopted. With the limited labour force at the disposal of the authorities, it is very important that as much aid as can be given by machinery should be obtained. We suggest that if the Superintendent is able to spare Mr. King for a few weeks, he might with advantage visit Assam and Cachar, and take note of the best machines used there which appear suitable for introduction into the Andamans.

The tea produced, which is of very fine quality, is already disposed of on contract to the troops in Burma. There is probably room for a large expansion of the demand, and the troops in Bengal and Madras might similarly be supplied with Port Blair tea.

38. Minor Industries.—Other minor industries which have been tried in the Settlement with more or less success are the growing of Liberian coffee, of Cacao, of Ceara Rubber, of Aloe and Manilla hemp (*Musa textilis*) for fibre, and of cotton. The last mentioned has proved a failure, and been abandoned.

The Liberian coffee did not appear to us to be thriving where it had been long established, although a recent clearing showed some very fine plants. Perhaps with further experience it may become possible to select the soil and aspect best suited to this crop. It is however rather a precarious one, and is not likely in the Andamans, any more than in Ceylon, to be able to compete profitably with tea. One of its advantages is that it does not require much labour once the plants have become established.

The few Cacao trees which we saw looked healthy, but the experiment is as yet on too small a scale to enable a judgment to be formed as to its success.

Ceara Rubber has been planted in several places in the Settlement, and the trees appear to thrive. But they are very liable to suffer from storms, the crown of foliage being blown off by the wind. A large plantation in North Corbyn's Cove which we saw had

been much damaged in this way by the cyclone of the 24th December 1889. Although the tree grows well, we believe it has yet to be proved that the produce is sufficiently abundant to repay the cost of cultivation. We were surprised to find that the *ficus elastica*, which would probably do well in the climate of Port Blair, had not been introduced as a road-side and ornamental tree, possibly hereafter to become of economic value. Another species of *ficus*, much resembling the *elastica*, but useless for the production of rubber and a less handsome tree, has been largely planted along the roads. Probably the true rubber tree would be equally successful if tried.

The variety of Aloe obtained from India for the sake of its fibre is not the best kind; its leaves are short, and do not yield fibre in sufficient quantity. A better kind might be sent for if it is desired to go on with the experiment. But the Manilla hemp appears likely to yield a more valuable fibre. We saw it growing luxuriantly in the garden north of Goplakabang, and where the soil is suitable it evidently does well in the Andamans. The best way of extracting the fibre has not yet been ascertained, and Colonel Cadell proposes to make further enquiries on the subject. It would probably be costly to obtain an expert from Manilla, or to send an officer from Port Blair there to learn the process. The Government of India in the Revenue and Agricultural Department could probably obtain the necessary information without much difficulty.

We were told that it was intended to try growing indigo in the new clearing which was being made at Anniekhet. It seemed to us doubtful whether this would prove a paying crop in Port Blair, or one likely to yield the steady employment all the year round which is desirable in convict industries. Even if the soil and climate (which are very unlike those of the indigo districts in India) are found suitable, the crop is a precarious one, and the preparation of the dye to be a success requires appliances which will have to be on a larger scale than the small area available will be sufficient to feed.

The Malabar pepper vine might, we think, be tried experimentally in the Settlement, some plants being procured from Malabar and made over to self-supporting convicts from that part of India, accustomed to growing it, for cultivation.

Excellent bricks and tiles are made in the Settlement, from clay yielded by decomposed serpentine rock. The buildings and bridges throughout the Settlement are admirably built, and the models followed in erecting them have been improved by degrees till they now equal anything to be seen in India. It has been suggested that if the native sailing craft which trade along the Chittagong coast could be induced to visit Port Blair, there might be an opening for a profitable trade in bricks, and also in stone cut at the Namunaghar quarries, with Burma, where these articles, owing to the high cost of labour, command very high prices. We leave this suggestion for Colonel Cadell's consideration.

39. Reclamation of jungle.—The reclamation of land for cultivation will always be an important industry in the Settlement. Not only does the land so reclaimed yield produce which supports the cultivator and furnishes a surplus for Settlement use: the land tilled by self-supporters and free residents is also assessed to land revenue, and some cash return is thus obtained for the Settlement treasury. Reclamations have hitherto been of three kinds: first, the reclaiming from the sea of mangrove swamps, the salt water being kept out by embankments, when the mangrove trees die after two or three seasons and are cut down for firewood and the stumps removed, and the soil gradually becomes sweet and fit for the cultivation of rice or the planting of coconuts; secondly, the hill-side clearings on undulating soil, where the forest is destroyed and the land planted with Indian corn, sugarcane, or *wrad dāl*; such land is granted revenue-free for three years to self-supporting convicts who undertake to clear it, and at the end of the third year (except where the crop is sugarcane, which in Port Blair is sometimes allowed to stand for as long as five years without replanting) it relapses into grass, its fertility being exhausted, and becomes grazing land for which a grazing fee per head of cattle kept is charged; thirdly, inland valley clearings such as we saw at Jarawakhari and Goplakabang, where the soil at the bottom of the valley is gradually shaped into rice fields or

gardens which yield a permanent crop, while the hill-sides are treated as above described under the second head. Reclamations of the first kind have always been made by labouring convicts; the work upon them is severe and disagreeable, and not such as is likely to be spontaneously undertaken by self-supporters. The rice fields when shaped and established yield very good crops, and we heard that self-supporters in Lamba Line village (one of the largest in the Southern District) were able to get as much as Rs50 a *bigha* for their fields when they leave the Settlement. In Chakkargaon, close by, the price named was Rs25 a *bigha*, which is very good, considering that the self-supporter has ordinarily only a ten years' interest in the land he tills. Such reclamation from mangrove swamp is however not capable of much extension in the neighbourhood of Port Blair. The work has been nearly done, the two most considerable tracts still continuing as swamps being on Dhani-leaf Creek and in the neighbourhood of Brigade Creek. The former might perhaps with advantage be reclaimed, but the latter is intersected with several waterways which it is of importance to keep open, as they afford access to the stone quarries of Namunaghar, to Kadakachang, Bajajagda, and further on to Mathura, Brindaban, and the new clearings in the Jarawakhári Valley. To keep these waterways, and at the same time to reclaim the swamp, would require miles of embankments along the course of the creeks, and be altogether a very heavy piece of work of doubtful utility. We think, therefore, that when Dhani-leaf Creek is reclaimed labouring convicts might be withdrawn from such swamp reclamation work, and used for other profitable industries indicated above.

The hill-side reclamation, as already stated, is done by self-supporter convicts; and most of the clearing in the Southern District has been carried out upon this plan. It is a question whether further inducements should be held out to self-supporters, by the grant of land revenue-free, to take a two or three years' crop (after the wasteful form of cultivation called *jhooming* in Assam and *taunggya* in Burma) from hill sides which after being denuded of forest lose their fertility so rapidly. We believe that the grazing ground is already almost, if not quite, sufficient for the stock of cattle on the Island; we have already adverted to the difficulty which exists in procuring wood for domestic requirements in the Southern District; and we would recommend that Colonel Cadell should consider whether further clearing of forest upon this plan should be allowed free of revenue in that District.

Dr. Lethbridge is inclined to think that terracing the hill sides, as practised in Chota Nagpur, where productive rice fields are shaped out of land which at first sight seems very unpromising, might with advantage be tried in the bare and now sterile tracts of the Southern District. We recommend that the experiment be carried out, if possible, by the agency of labouring or self-supporter convicts from Chota Nagpur acquainted with the system followed there. If by any such means the large areas of unproductive land in the Southern District can be got to produce a crop, a great work will have been accomplished. In all such places it is of importance that forest should be left standing along the tops of the ridges and for some distance down the sides, so that a water-supply may be ensured for the terraced fields beneath.

The clearings now being carried out in the Jarawakhári Valley are the most considerable recent reclamations. Most of them have been made by self-supporters. The villages of Hobdaypur, Tusonabad, and Cadellganj have been so opened out, and promise to prove thriving communities. Only at Anniekhet, the site nearest the head of the valley, is the work undertaken by labouring convicts. It has to be remembered that the self-supporters who colonized the three lower settlements were all thoroughly acclimatized, and we were informed that their villages were extremely healthy. The labouring convicts at Anniekhet, on the contrary, were largely made up of new arrivals, and several of them were unfit for such work in dense jungle; we fear that the returns of sickness and mortality among them are not likely to prove satisfactory. The conditions on which reclamations are made in this valley by self-supporters will be found stated in our Diary under the date 30th January 1890,* and we would recommend for Colonel Cadell's consideration that such clearings should in future be left to this class, labouring convicts being reserved for more remunerative industries entailing less exposure.

* See also Andaman and Nicobar Manual, page 153, addition of 1st October 1893.

40. Vegetables for convict use.—The large vegetable garden which we saw at Goplabang seemed most productive, and the vegetables grown in it for convict use—tapioca, Tahiti potatoes, yams, papayas, plantains (the two latter gathered green and cooked for issue), and gourds, were excellently suited for the purpose. The first two might with much advantage be tried in the jails of Bengal and probably other parts of India. We suggest that special inducements, by the gift of good seed and the promise to buy the produce, should be held out to self-supporters to grow onions in large quantities. This vegetable is unequalled as an antiseorbutic, and is particularly useful in the treatment of the malarial anæmia which prevails to some extent in the Settlement.

41. Condition of the Settlement Cattle.—We have read Mr. Frost's report on the condition of the Settlement cattle. The castration of inferior bull-calves is now thoroughly insisted on. The starving of the young stock in order to have the milk for sale is an evil which it does not appear practicable to check. Possibly if the grazing fees were raised the measure might result in causing fewer inferior animals to be maintained; but it might also lead to an increase in the cost of the milk and *dahi* now supplied to the convicts. We would suggest that the Superintendent should consider whether it should not be a condition of the license of a self-supporter possessing cattle that he should store a certain quantity of hay for their use every year during the dry months, and that he should maintain a patch of guinea-grass, which with proper attention succeeds very well in the Settlement, and keeps green and succulent all the year round.

42. Miscellaneous suggestions.—Finally, we resume below a few miscellaneous suggestions and recommendations which have not found a place in the preceding paragraphs—

- (1) *Workshops.*—Wherever prisoners are employed in workshops, the sheds should be enclosed with wire netting or wooden gratings, and provided with a light door which can be kept locked (*vide* Jail Committee's Report, page 14, paragraph 41).
- (2) *Cook-sheds.*—We recommend that a trial should be given to the fire-places invented by Mr. Donaldson of the Presidency Jail, Calcutta. These effect a great economy of fuel, and are much tidier and cleaner than ordinary cook-sheds in which the smoke is allowed to escape.
- (3) *Convict servants.*—It is urged by local officers of experience that with the exception of Government officials no free persons should be allowed to employ convict servants. There are a sufficient number of free settlers to meet the wants of those free persons who require servants. Similarly, self-supporting convicts should only be allowed to engage self-supporters as servants. We think that some such regulation is called for in the interests of discipline.
- (4) *Convicts' letters.*—The present rules under which convicts are allowed to send and receive letters will be found in sections 282 to 289 of the Manual. It was originally contemplated that the letters sent and received should be read by the authorities, as prisoners' letters are read in all jails in Great Britain and India. We understand, however, that this is not done, although all the letters pass through the hands of the District Superintendent of Police. It appears to us desirable that they should be read, and, if necessary, suppressed, the prisoner being informed. Nothing is more likely to destroy the deterrent effect of transportation than accounts sent home by prisoners of the advantages they enjoy at Port Blair. In inspecting a divisional office we noticed that the registers (Nos. 16 and 17 of section 400, Andaman and Nicobar Manual) of letters received and sent were not properly arranged alphabetically, and that the same name often appeared spelt in different ways (*e.g.*, Imam and Emam, Issur and Esur, &c.). There was no record sent with a convict transferred to the division of the letters he had sent or received before transfer. In

our opinion this subject is one which calls for close supervision by the Police, as the Central Office of the Settlement.

- (5) *Treasury business.*—We had not time to make a regular inspection of the Treasury, which deals with very large sums annually. It is worked by a strong establishment, and the objection statements which we saw appeared to show that it was well managed. It should, however, we think, be periodically inspected by the Superintendent and Deputy Superintendent, as District Treasuries are required by the Civil Account Code to be inspected by Commissioners of Divisions. Questions for Treasury inspection are laid down in the Code, and printed copies of them can be obtained from India. The Savings Bank business, which elsewhere in India is managed by the Post Office, is here, for obvious reasons (since most of the depositors are convicts), managed in the Treasury. There are a great number of separate accounts, and this is a branch of business where careful check and inspection are very essential.
- (6) We have already noticed (paragraph 31, VIII, above) how economy might be effected in the blanket factory by the use of machines. We would here observe that the blanketing made might be woven of much looser texture if it were shrunk or milled afterwards. This is done in the Punjab and North-West Provinces Jails by rubbing the blanket with the feet, which forms a very penal form of labour, appropriate to the convicts in the Viper Jail, which adjoins the Blanket Factory. The method to be adopted can be ascertained from Punjab or North-West Provinces convicts.
- (7) The supply of fish for the convict dictary is very uncertain. In the Northern District the water north-west of Viper Island is staked, and the fish driven into the enclosure. In the Southern District fishing boats which put out to sea are depended on. We suggest that with an increased number of steam launches steam trawling might prove a success.

43. Concluding remarks.—We hope it will be understood that in offering these criticisms and suggestions in regard to the administration of the Settlement of Port Blair for the consideration of the Superintendent and the Government of India, we have not overlooked the great success which has already been attained in the management of the Penal Settlement. The general impression which we received from our brief stay at Port Blair as to the system, order, regularity, and security of the administration was most favourable. We are aware that the administrative authorities have had to contend with great difficulties, and that the success which has been achieved has been the result of untiring exertions on the part of the Settlement Officers, and of none more than the present Superintendent. The demands which the working of the Settlement makes on the physical and mental powers of its officers are severe, and we are satisfied that what has been attained could not have been secured without much zeal and self-denial. To carry on the administration with equal success, and to introduce the reforms which experience suggests, require high qualities on the part of the Settlement Officers, and we hope that the Government of India will find in our recommendations on this subject (paragraph 21) the means of obtaining for the Colony the services of officers not inferior to the many eminent and experienced men who have served it in the past.

We have the honour to be,

SIR,

Your most obedient servants,

A. S. LETHBRIDGE.

C. J. LYALL.

APPENDIX A.

Diary of Proceedings at Port Blair.

20th January 1890.—Arrived at Port Blair by S. S. *Peshwa* at 5-30 P.M.

21st January.—Crossed from Ross to Aberdeen. Visited largo embankment in progress south of the Deputy Superintendent's house, which when complete will hold 60 million gallons and assure the Aberdeen water-supply during the dry season. Then to the workshops of the Artificer Corps, Southern District, where we saw smith's work and carpentry, and the district store godown. Then to the District Hospitals at Haddo, which were fully inspected: also the lunatic and leper wards. Then home to Ross.

22nd January.—Left Ross at 7 A.M. for Viper Island (5 miles distant) by steam launch *Florence*, arriving at 8 A.M. Inspected hospitals of Northern District, Southern Division. Then went through the Viper Jail, where are confined the convict punishment gang and the prisoners of the non-convict population. Then to the barracks above the jail, now used by invalid prisoners employed on light work, chiefly basket-making. Then to Mr. Man's house on the highest point of the island. Thence back to Ross by steam launch.

23rd January.—Crossed to Aberdeen and rode to tea-garden at Navy Bay: inspected the tea-house, where a few men were rolling leaf which had just been plucked. Then to the garden, where pruning was going on. Inspected the barracks and cooksheds. Thence through the forest to the brick-field at Minnie Bay, where we found brick-making going on, with Bull's patent kiln used to burn the bricks. Inspected the barracks here. Thence we walked through forest round the head of the bay to a place where a bund has recently been thrown across with a view to reclamation. Thence we turned up by a path through the forest to the hill clearings of Pahargau, which village we saw, and went down to the high road near Lamba Line. Saw the barracks here, and rode home to Aberdeen.

24th January.—A very rainy day. Spent the morning in going through the barracks in Ross, where the newly arrived prisoners are accommodated, and in visiting the hospitals. After breakfast had a conference with the Commissariat Officer, Lieutenant Rynd, on the subject of supplies and the possibility of substituting maize flour for atta.

25th January.—Started at 7 in steam launch *Ross* for Bamboo Flat. Went through the workshops there (Artificer Corps, Northern District) where smith's work and carpentry including boat-building are done. Here is the foundry where small castings can be turned out. Thence rode *via* Bamboo Flat village, Stewartganj, and Wimberleyganj, to Goplakabang, 6 miles, where we saw the tea-garden in charge of Mr. Barrow, and went through the factory. Pruning was going on, but no manufacture. Thence we went on $1\frac{1}{2}$ miles further to the largest vegetable garden in the island, where very heavy crops of tapioca, Tahiti potatoes, yams, papayas, plantains, and gourds are raised; *Musa textilis* is also a success here. Then back by the way we had come as far as Wimberleyganj, where we turned off to the west and rode by Kádakacháng to Bájajáda; here, after visiting the barracks, we took boat and rowed some five miles down a beautiful winding creek, fringed with mangrove forest, until we emerged into Brigade Creek, where we found the *Ross* and steamed homewards.

26th January (Sunday).—Went through the barracks on Ross and saw the Sunday kit inspection. Noticed the great differences between the equipment sent with transportation convicts by different provinces.

27th January.—Went by water to Mithakhari Ghât and rode thence, avoiding villages of Mithakhari and Ogra Barnij, to Homfray's Ghât over some new reclamation. Thence *via* Badmash Pahar to Tytler's Ghât, where we climbed a hill 300 feet high (the former site of Mr. Homfray's house) and had a fine view over Port Mouat and out towards Tarmugli and the Labyrinth Islands. Saw the Commissariat sheds here, where the cattle received from the Nicobars are kept. Then down by a path through the forest to an old fruit-garden (formerly called Bloomdale gardens), where we mounted and rode by the village of Shuldári, passing and visiting the plantation of Liberian coffee, to Dhani-leaf Creek. After visiting the village here we turned back and inspected the barracks, and saw the convicts served with their mid-day (10 o'clock) meal. Most were Burmans, whom we saw take rations of wheat chapattis, as well as *dahi* (though in Burma the use of milk is unknown). Then past the cocoa plantation, which was visited, by the road bordering the reclamation to Baghelsingpura and Sipighât (the latter so called from a large Andamanese Kitchen Midden of oyster shells), where we took boat and rejoined the *Ross* a little way down the Bumlitian Creek.

In the afternoon after return to Ross Mr. Lyall was present at a muster before the Superintendent of the 120 convicts received by the S. S. *Peshwa*, and heard them addressed, and the conditions of life in the Settlement read out to them. Among them was a man from Orissa who had spent 10 years (from 1867 to 1877) before in the Settlement as a convict and was now returned with a life sentence. He was a noted dacoit, but being over 50 years of age should not have been sent to Port Blair. In many cases the descriptive rolls sent with the convicts, and the information given as to the circumstances of their crimes, were most defective.

28th January.—The forenoon was spent in a detailed examination of the women's jail at South Point.

29th January.—Crossed to Aberdeen, and rode thence *viâ* Artificers' workshops, Lamba Line village, Pahargaon barracks and village, Protheroeapur (where a new bungalow brought from the Nicobars on the abandonment of the Settlement there has been completed) to Gararcarama, a large village with a considerable extent of reclaimed land. Here we visited a saw-mill at the head of a salt-water creek, and a large new school house of brick which is being built to accommodate the children of the flourishing self-supporter villages of Protheroeapur, Gararcarama, Bumlitán and Bagbelsingpura. Thence we rode by a long *bund* which has effected a very extensive reclamation, now partly planted with cocoanuts and partly assigned for cultivation by self-supporters, to Bumlitán barracks. Here guinea grass is grown for fodder. Thence we proceeded by a continuation of the *bund* to Sipighát and thence by boat and steam launch to Ross.

30th January.—Started in Ross and steamed *viâ* Brigade Creek and Stewartganj-Creek to the landing place for Kádakacháng, where Messrs. Man and Jessop met us, and we mounted and rode by a metalled road to the new clearing at Anniekhet, passing through Bájájáda and leaving the village of Mathnra on the right and that of Brindaban on the left. About 250 convicts were engaged on clearing at Anniekhet and 50 in building a new permanent barrack, the completion of which is expected in May next. Meantime a temporary bamboo barrack is used, the superficial space in which is only 23 square feet per man, while the roof is very low. The labouring convicts of all classes here cook for themselves, and get a milk ration. Saw a muster of the tree-felling gang. Comparatively few of them are Burmans and only one an Assamese (Mech), to whom such work would probably be congenial. The majority were convicts from the North-West Provinces, Punjab, Bombay and Madras. The trees are very tall and great in girth, and chiefly gurjon. Most of them will be burnt or rot where they lie. It is proposed to sow part of the cleared area this season with indigo.

We then rode and walked (where riding was impossible) through the forest to three new self-supporter settlements in this valley, called Cadellganj, Tusonabad, and Hobdaypur. The whole valley (which opens out by a stream laterally to the west, and drains eventually northwards into Port Campbell) is called Jarawakhárá and is the most extensive piece of flat land, excluding reclaimed mangrove swamps, available for cultivation in the neighbourhood of Port Blair. Cadellganj was cleared last year, and further fellings to add to its area are now being carried out; Tusonabad and Hobdaypur were cleared two years ago. In all three the clearing was done by self-supporters; men are given an axe and a kodáli, with six months' rations, and told off to work in gangs of five under a mate. The usual rate of clearance is one bigha a month, or five in the five open months, per man. The land cleared is divided among the gang who cleared it, and allowed for two years rent-free. The area cleared presents the appearance of a *Jhoom* in the Assam jungles, and is dealt with very much in the same manner. The hill slopes are, as elsewhere in the island, put under crops of maize, and plantations of sugarcane, for two years, after which their fertility is exhausted and they relapse into grass, being used for grazing and the secondary jungle kept down. The low flat land at the bottom of the valley is gradually, as the felled trees decay or are burnt, shaped into rice lands, for which the stream and its affluents from the sides of the valley afford a water-supply. Pending the laying out of regular rice fields, mixed crops (exactly like the *Jhooms* in the North Cachar and Garo Hills) of long stemmed rice, red pepper, gourds and other vegetables are taken off these lands. The villages are built upon spurs to the east of the valley, and the people in them were said by their Chaudhris and Chaukidars to be very healthy.

From Hobdaypur we turned into the metalled road (made since Major Hohday's survey) which leads east to the village of Ogra Baraij, with branches to Tusonabad and Cadellganj. Here there is a Forest Department depôt where some of the timber obtained from the clearings in Jarawakhárá is shaped and sawn for export. Buffaloes are used to draw the timber carts and answer well. We found the launch at Mithakhárá Ghát and returned in her to Ross.

31st January.—Visited the hospitals on Chatham Island, which receive the sick from the Northern Division of the Northern District. The buildings are among the oldest in the Settlement, and leave a good deal to be desired. Then inspected the saw-mills. The engines date from 1874 and are in need of renewal. Then crossed to Hopetown jetty, and rode up Mount Harriett, 1,100 feet. The barracks formerly used as a sanitarium on this hill have mostly been moved elsewhere. Coffee had been planted on the hill, but it has died out and the slopes where cleared are now planted with cocoanuts. At the top of the hill is a cattle establishment, consisting of 2 fine bulls, about 80 cows, and 20 to 30 calves. Rested at the bungalow, when heavy rain came on. Then descended by a rough path along the eastern face of the hill to North Corbyn's Cove. On the way we passed through a plantation of Ceara Rubber trees, which had been greatly damaged in the cyclone of 24th December 1880. Many of the trees had lost their crowns of leafage, which in some cases had been planted after being blown off, and seemed likely to strike. From North Corbyn's Cove we rode in heavy rain by the coast round to North Bay, where we took boat back to Ross. The rain prevented us from inspecting the salt works, about $\frac{3}{4}$ mile to the north of Corbyn's Cove. The barracks at the Cove and at North Point are said to be unhealthy and are little used.

1st February.—Dr. Lethbridge spent the day in making a detailed inspection of Viper Jail, and of the office of the First Assistant Superintendent on Viper Island. Mr. Lyall

with Colonel Cadell rowed down the coast to South Corbyn's Cove, and thence southwards by a new road which is being cut along the coast to Brookesabad. Powder is required in places to blast the rock, which is very hard serpentine. Brookesabad is a flourishing self-supporters' village. The hills about it have been completely cleared. There is little rice land, and the hill sides are said to become barren after three years' cropping. Here, as elsewhere in the island, sugarcane is allowed to stand on the hillside land for many years, a crop being cut each year after the first. From Brookesabad we rode by a path across the hills to Birchganj, where the ground becomes more open. There is a school here which 17 children attend. Then on through the valley to old Protheroeপুর, passing the site of an abandoned saw-mill (which has been moved to Garacharama, *vide* entry of 20th January), then down a metalled road by open rice-lands (draining into the creek of South Corbyn's Cove), till we reached the lands of Pahargau and Lamba Line, where we turned up to visit that part of the tea-garden which we had not seen on our previous inspection. Found plucking going on, a fine flush having been brought on by the recent rain; also forking the soil between the bushes. Then down to the saw pits at Navy Bay; the sawing here is done by hand. Then *via* the workshops to Aberdeen jetty, where we crossed to Ross.

*2nd February (Sunday).—*Did not go out.

3rd February.—Dr. Bethbridge remained at home to draw out sketch of report. Mr. Lyall went with Colonel Cadell to inspect the new bund behind Captain Thornhill's house (*vide* entry of 21st January), which was severely tried by the late continuous heavy rains. We then revisited the Artificers' workshop, and inspected the work more carefully than we had done on the 21st. Then to Navy Bay, where we saw the lime and tile kilns. A gang of chain gang prisoners is employed here on punning *malis*. Then to Navy Bay barracks, where affairs are unhealthy; no cause is apparent. Then by coast road to Dover Gardens, where various kinds of economic plants and trees have been acclimated. Several well-grown mango-trees are seen here, but the fruit is said not to be satisfactory. Much hay is got off the grounds forming the garden. At the top of the gardens is the Forest Officer's house, and beyond it towards Phoenix Bay a large hillside plantation of coconuts which has proved an almost entire failure, yielding hardly any nuts. At Phoenix Bay is a gang of "habitual recipients" employed in stone-breaking.

4th February.—Dr. Bethbridge at home busy with report. Mr. Lyall went with Colonel Cadell to Police lines, and saw the men put through evolutions, volley-firing, &c. The barracks were inspected, and then the Commissariat cattle and sheep sheds were visited. Then we went on to inspect the Aberdeen barracks, some of the largest in the island. Among them is the barrack in which the "habitual recipients" are confined at night. We then crossed to Ross, where the office of the Assistant Superintendent in charge of the Ross Division was inspected and his books examined. The treasury (of which the Assistant Superintendent is the officer in charge) was visited, and the recent objection statements examined. This treasury does not appear ever to have been inspected as reported by the Civil Account Code. The Savings Bank accounts (of which there are some 2,000) are kept here and not as elsewhere at the Post Office. The treasury establishment is highly paid and should be efficient.

5th February.—Mr. Lyall started with Colonel Cadell for Aberdeen jetty. Thence walked *via* reclaimed land to South Point village (otherwise called Machhligau), inhabited chiefly by *dhobis*; there we mounted and rode to the self-supporters' villages of Dudhgaon, Nayagaon and Chalkargaon. In Nayagaon we saw Banga Reddi, an enterprising self-supporter who was entrusted with an experiment in sheep-breeding which has not proved a success. From Chalkargaon (where the rice-land is said to sell by auction for Rs. 25 a bigha) we turned up again through Nayagaon, where much sugarcane is grown, which is expressed by means of a wooden press of upright saw-rollers (a pattern which resembles that used in the Habiganj Sub-Division of Sylhet and the Tipperah District of Bengal). Then by road *via* Janglight village to the large school at Aberdeen. This school is the largest in the island, and has 170 boys and 30 girls attending it. It is a fine building, formerly the hospital of the Madras Native Infantry when the regiment was located at Aberdeen. There are several boarders from Garacharama and other distant villages. Besides reading and writing, carpentry and smith's work are taught.

In the afternoon we visited Colonel Cadell's office, and went minutely into the work of each member of the establishment.

6th February.—The morning of this day was given up to a detailed inspection of the office of Captain Thornhill, the Deputy Superintendent.

7th February.—Several hours were spent in dispensing with Colonel Cadell, the Superintendent, the answers given by Captain Thornhill and Messrs. Man and Tuson to certain questions which had been placed before them. At 5-30 we embarked on board the *Peshwa* for Raugoon.

Besides the visits paid to the different parts of the Settlement as detailed above, the afternoon of each day was generally given to discussing with the Superintendent the subjects treated in the Report, and the notes we had made during our inspections.

there is no cross ventilation. The prisoners sleep on continuous raised platforms, a very objectionable arrangement as there is nothing to prevent them from rolling together. There is also no prisoner watchman inside the ward, and the lighting arrangements being defective, there is nothing to prevent gross immorality in these wards at night. These wards are moreover quite unsuited for the confinement of the worst characters in the Settlement, and nothing short of separate confinement in cells can ever make jail life here sufficiently penal and deterrent. About 20 prisoners were at work on this platform beating coir, a good and penal form of labour.

We found 89 prisoners employed in a workshed, on wheat-grinding. The workshed is faulty in design, as the ventilation is deficient. On measuring the capacity of this shed it was found that each prisoner had only 23 square feet of space. This serious overcrowding of prisoners employed on a very hard form of labour must have an injurious effect on their health. The task exacted, 20 seers, is also a heavy one, but the flour taken is of coarse quality. In our opinion 40 square feet per prisoner in this particular shed would not be too much space to allow. This would materially alter the capacity of the jail, and as there is no more building space available, no increase of accommodation is possible.

There is a block of 15 cells, but we found only a few of them occupied. In one a prisoner was handcuffed to a staple in the wall. Under the rules in use in Bengal this punishment is not allowed to be carried out in cells, because it would not be possible to render assistance to the prisoner if he fainted or was suddenly taken ill. It would be more penal if this form of punishment for obstinate refusal to work were carried out in a large ward under the eye of a petty officer and the handcuffs attached to a rod or chain hung from the roof. At present much of the punishment is lost by allowing the prisoner to lean against the wall. For the worst cases the punishment of separate confinement with or without labour for lengthened periods recommended in the Jail Committee's Report, page 94, paragraph 14, should, we think, be tried here. It has been found most efficacious in dealing with prisoners on whom all other forms of punishment have been tried without effect. All cells not used for punishment should be occupied by prisoners on wheat-grinding, so as to relieve the overcrowding of the workshed. At night also they should be kept full.

There is a small ward and separate workshed for locally convicted prisoners. These convicts are not associated with the transportation prisoners, and pass the whole of their time in Viper Jail. They earn no remission, and are not supplied with history tickets. As some of them have long sentences, they ought, we think, to be brought under the benefit of the mark system in use in Indian jails and be promoted to the grade of convict officer within the walls of the jail. These prisoners like the others are employed on wheat-grinding.

The movements of prisoners are not controlled by the system of parades now in force in Indian jails. This appears to us essential if discipline is to be maintained and jail life made more deterrent.

There are two entrances to the jail, and they are both insecure. We found these gates left open by the persons in charge. The recommendations made by the Jail Committee in page 12, paragraph 19, on this subject should be given effect to.

We have satisfied ourselves that a new jail for the Settlement is urgently wanted. This jail should be on the cellular plan and form part of the cellular jail which should be constructed to give effect to the preliminary stage of separate confinement. One or two worksheds for the employment in association of those prisoners who deserve the indulgence might be added. The settlement officers who have been consulted appear to think that the reclaimed land on Viper would be the best site for such a jail. The only objections we see to this site are, that it is not sufficiently large in area, and there would be some difficulty experienced in building on made soil. The distance to Viper from the head-quarters at Ross (five miles by water) is also a serious drawback as tending to lessen the supervision which is necessary if a strictly penal institution is to be organized. In our opinion the time has come to inaugurate a proper jail system, and an experienced officer should be sent here to introduce all the details of jail discipline and management recommended by the Jail Committee. It would be possible to do this to some extent even with the present buildings. When a proper jail has been organized it should maintain registers and submit returns similar to those now ordered for all Indian jails. This will give the Government of India an opportunity of comparing its working with that of similar institutions in Burma and India. In the proposals in our report we have provided for a jailor. This subordinate with the assistance of one convict writer will be able to do the whole of the clerical work required.

A. S. LETHBRIDGE,

C. J. LYALL.

APPENDIX C.

Memorandum by Dr. Zeltbridge on the Sanitary condition of the Settlement.

1. To assist me in considering the question of the health of the prisoners in the Settlement I appended a diagram taken from the annual report for 1888-89, which shows the sick and death rates and also the rainfall for 31 years. In regard to the facts contained in the diagram the following observations are made in paragraph 15, Chapter XVI of the report for 1888-89:—

"From the above diagram it will be seen that during the first ten years of the Settlement, the death rates were very high, and after this everything was for a time sacrificed to health. In consequence partially of this reaction, the death rate fell from 19.16 per cent. in 1867 to 1.21 in 1870.

"A system was introduced in 1871 under which discipline and development of the Settlement, as well as sanitary conditions, received due consideration, and in introducing this system, Sir Donald Stewart foresaw that the health of the convicts would to some extent deteriorate, but this was a risk which it was considered criminals in the position of transported convicts were, by the nature of their condition, expected to run under.

"Under this system, the death rate gradually rose until it reached 6.73 per cent. in 1878-79. The system was then modified, in such ways as the more careful working of the convicts during the morning, and the administration of new arrivals.

"Owing to this and other causes, such as the more weekly among the convicts having died during the preceding years of high mortality, the death rate gradually fell, year by year, to 1.62 per cent. in 1884-85. It then gradually rose to 2.30 in 1887, and in 1888, the year under review, it has risen to 4.18 per cent. The Superintendent concurs with the Senior Medical Officer that this rise is entirely attributable to climatic causes, as the system of working the convicts and their general treatment which have been in vogue during the past eight or nine years have been followed during the year under report. A proof of the correctness of this view is reflected in the fact that the death rate among the convicts in the female jail, who sleep in fine airy barracks and work in spacious sheds, has risen from 3.09 per cent. in 1887 to 11.4 in 1888 and their sick rate from 5.23 to 6.15.

"It may have been noticed from the table given above in paragraph 12 that the increase in the death rate here, among the male convicts, occurred almost entirely in the Northern District, which district was during the year under the charge of two most careful officers, Messrs. Man and Thron, who take great interest in the welfare of the convicts."

2. It is unnecessary for me to offer any observations in regard to the extraordinary fluctuations in the death-rate in the earlier years of the Settlement. They appear to have been clearly influenced by the fact that when the death-rate rose to such figures as 19.16 per cent. in 1867 and 6.73 per cent. in 1878-79, the medical side of the administration received more attention, and special precautions had to be taken in regard to the sanitary conditions of the stations and the work of the convicts. These precautions were said to have retarded the progress and development of the Settlement. On the other hand, when for the five years 1869 to 1873 the death-rate fell to 2 per cent. and below that figure, it was felt that the executive authorities would be justified in relaxing the measures which had been taken to maintain the health of the convicts at a high standard. As we have seen, this modification of the sanitary precautions culminated in the year 1878-79 in a death-rate of 6.73 per cent. Since then more attention appears to have been paid to the health of the prisoners, and for three years from 1883-84 to 1885-86 the death-rate again fell below 2 per cent. It is not suggested by the local authorities that in these years of low mortality, the development of the Settlement was in any way retarded by the introduction of special sanitary measures. Since 1886 there has been a progressive increase in the death-rate up to 1888, when it reached the high figure of 4.18 per cent. for the whole Settlement and the very unfavourable rate of 5.13 in the Northern District. The local medical authorities in explaining the increasing death-rate in 1886-87 and the following year attribute it to the removal of certain restrictions in the selection of prisoners for the Andamans. The first batch of convicts received from India under the new rules arrived in October 1886, and it is probable that this fact has to an appreciable extent influenced the death-rate in the following years, but it cannot in my opinion be held to account for the sudden rise from 2.30 per cent. in 1887 to 4.18 per cent. in 1888. As regards the further explanation which has been offered for the high mortality, that it was due to the unhealthiness of the season, I am afraid that the medical statistics in regard to sickness do not bear this out. The daily sick-rate which was 6.72 per cent. in 1883-84 when the mortality stood as low as 1.66 per cent., was only 5.91 in 1888 when the mortality reached 4.18. From this I am led to the conclusion that either there was less sickness or that prisoners were allowed to remain out of hospital and therefore not treated until their complaints assumed a more severe type. In page 76, paragraph 12, it is stated that an increased amount of sickness prevailed among the European and Native troops, that their average daily sick increased as well as that of the police and convicts. From the table given in paragraph 13 it will be seen that while there was a small increase in the sick-rate, the mortality among the troops and the police was lower than it was in 1887. There was a larger rainfall in 1888 than in any year since 1882-83, and as much as 42 inches fell in June



...allable.

against an ordinary rainfall in that month of between 14 and 20 inches, and this no doubt rendered the rainy season unhealthy and the month of June particularly so.

3. My visits to the various stations, barracks, and hospitals have shown me that there is considerable room for improvement in certain sanitary details, especially as regards (1) the housing of convicts employed in junglo clearing, brick-making and on wheat-grinding on Viper; (2) the rules regarding bathing; (3) the rules regulating the washing, airing and drying of clothes. It appears to me also possible to improve the medical administration of the Settlement in regard to (4) the measures which should be taken for the early detection of loss of health; (5) the provision of a medical history of each convict which can be consulted before prisoners are selected for special forms of labour, and (6), lastly, the early treatment and segregation of certain diseases. On all these points I propose to offer a few remarks.

4. The medical authorities appear to pay little attention to the question of the space provided for prisoners in the sleeping barracks and workshops. It is true that there are a large number of barracks which are more or less empty where the accommodation is ample, and it is from the capacity of these barracks that the figures given in page 75, paragraph 4, are derived. There being no lock-up register kept, I am unable to say how these figures for the year have been obtained. It is not necessary to discuss here the extreme importance of providing sufficient accommodation in the sleeping wards and workshops. The Jail Committee has expressed the opinion that in jails in healthy localities where there are only two rows of beds in the barrack, each prisoner should have 36 square feet of superficial space and 540 cubic feet of capacity. In unhealthy localities and where there are more than two rows of beds, the allowance should be raised to 50 square feet and 750 cubic feet. Seeing that the Settlement has during certain years been exceptionally healthy with an allowance of 36 square feet and 540 cubic feet, and this notwithstanding the fact that the prisoners sleep in four rows, I would not suggest any alteration in the capacity of those barracks which are in healthy situations and where the prisoners are employed in ordinary labour. Where, however, the site of the building, or the occupation of the prisoners are known to be unhealthy and to give rise to much sickness and mortality, in such industries in fact as brick-making at Minnie Bay, or at Anniekhet, the amount of space should certainly be raised to 50 square feet and 750 cubic feet per man. We roughly measured the sleeping accommodation provided for the brick-makers at Minnie Bay, and found that only 300 cubic feet, or less than half the space recommended, was allowed. Again at Anniekhet the superficial space allowed to each prisoner in a low, badly-ventilated, temporary building was only 24 square feet per prisoner or less than half what is required. The smell of organic matter at 9 o'clock in the morning and three or four hours after the prisoners had left the barrack was very perceptible. This no doubt was in some measure due to the large amount of damp clothing left in the sleeping ward, the weather having been rainy. We have already referred in our report on the Viper Jail to the insufficient accommodation in the sleeping wards and the extremely small allowance of 24 square feet per prisoner in the workshop of that jail. The superficial space allowed to sick prisoners in the hospitals on Viper was only 40 square feet. I mention these facts to show that the control exercised by the Medical Department in this important particular is not as close as it should be. To improve the means of exercising some supervision in respect to the number of prisoners which a ward can accommodate and the numbers actually locked up, I would recommend that the outside of each barrack should have painted on it figures, showing its measurements and capacity, and that a regular lock-up register, such as that used in Bengal jails, should be kept in the Roman character by the Station Munshi or Jamadar. From this register the Medical Officer can see at a glance the amount of overcrowding which has taken place on any one day or any number of days. The permanent barracks are as a rule fine airy structures made of wood, and well raised off the ground. The recent plan on which some two-storied barracks have been constructed at the Navy Bay tea-garden station is defective, inasmuch as the lower wards are only eight or nine feet high, and the boarded floors allow the foul air of the lower ward to pass into the upper ward. It seems to me also possible to devise a better ventilated temporary barrack for new clearings than the one we saw occupied at Anniekhet.

5. The airing of clothing and bedding under Rule 95 of the Manual is only done once a week, on Sundays, if the weather is fine. More frequent opportunities for doing this should be devised, especially on dry days in the rains; the rules suggested for mid-day parades in paragraph 3, page 135, of the Jail Committee's report, might if adopted give the required means of airing the clothing and bedding on every fine day.

6. The washing of prisoners' clothing is now done by convict washermen, appointed for this purpose. Considering that Sunday is usually a free day with most prisoners, and that natives of the lower classes are in the habit of washing their own clothes, it seems to be a waste of labour employing washermen for this purpose. A convict who has the washing of his own clothes will certainly take more care of them and not subject them to the treatment they usually receive from dhobies. It is hoped that the provision of bathing and washing platforms to be attached to all wells and reservoir will afford the necessary facility for the washing of clothing by individual prisoners on Sundays. There would also be less chance of disputes and quarrels about the identification of each prisoner's clothes. I would advocate the construction of a drying room for each barrack in which prisoners could hang up their wet clothes on return from work, and in which the clothes washed on Sunday could be dried if there was no sun. I am sure that this simple measure would, especially in the rains, prevent much sickness from chills caused by taking wet clothes into the barracks at night or putting them on the next day when going to work. The

clothing if regularly and properly dried would also last much longer. We propose to consider the question of the amount of clothing to be allowed to each prisoner under the head of proposals for reducing the expenditure of the Settlement.

7. In regard to the bathing of convicts, the rules of the Manual appear to me defective and capable of improvement. Under section 88 the prisoners are allowed to wash their hands and faces, and under section 94 all prisoners are expected to bathe once a week. We know as a fact that many of those who have the opportunity take daily baths. In my opinion a daily bath in a climate like that of Port Blair is a necessity. Whenever it is possible it should therefore be the rule to make every prisoner bathe either in fresh or salt water once a day. The bathing parade recommended in the 135th of the Jail Committee's report does not occupy more than 10 to 12 : : : : reservoirs are filled beforehand by the convicts who do the sweeping and cleaning of the barracks. There will be a difficulty in some localities in doing this, but by the provision of wells and bathing platforms, this should be overcome. In connection with all tanks and wells in the Settlement there should be bathing and washing platforms, so that it may be possible to absolutely prohibit the pollution of any tank or fresh water reservoir. If this object was kept steadily in view, and the building work required, undertaken in the rains when there is labour to spare, we should soon have a sufficient number of bathing and washing places in all parts of the Settlement. Proper arrangements are made for having a sufficient supply of good drinking water.

8. The question of food has already been considered in connection with the recommendations for increasing the penal character of the imprisonment at Port Blair. Here I would only draw attention to the necessity that exists for ascertaining the antiscorbutic value of the vegetables which are so largely used at Port Blair, *viz.*, tapioca and Otaheite potatoes. The growing of antiscorbutic fruits, such as pineapples, tamarinds and limes, should be encouraged to the fullest extent in all self-supporters' villages, and a lime orchard should be provided near every station or barrack. We know as a fact that lime trees grow well, and that limes sell at a nominal rate, but it is difficult to make prisoners spend any money in their purchase. The hours for meals are very suitable, and no change in this respect is wanted. The quantity of food allowed in the diet scale is ample, but it is a question whether prisoners who receive dry rations use the whole of it for themselves. Looking at the large amount of money accumulated by some prisoners who only receive 12 annas and 1 rupee a month, it is more than probable that the sale of some of the articles of diet is one of the sources of their income. It is to be hoped that with increased European supervision this will be prevented.

9. The rules and regulations for the early detection of loss of health among the convicts seem to me altogether inadequate. As an instance it may be mentioned that on our visit to the Haddo Hospital, I found waiting for admission a convict dhoby who appeared very ill and was in a high state of fever with pain in his right side. On enquiry it was ascertained that he had been ill for 10 days with pneumonia, and had only that morning come to hospital. When asked the reason for his not coming before, he replied that he hoped to get well without coming to hospital. In this instance we have a typical case of neglect from the prisoner's own ignorance which in all probability will go to increase the death-rate. The whole medical establishment of the Settlement is, for administrative purposes, concentrated at the stations of Ross, Haddo, Chatham and Viper, with a female hospital at South Point. This arrangement is no doubt the best that could be devised for the treatment of the sick who are actually admitted to hospital. But for supervising the health of the convicts in their stations, and watching the sanitary conditions under which they live, nothing could be more ineffective. With the increasing size of the Settlement, and the scattered area over which the barracks are distributed, the inspection of convicts by medical officers even once a month has become a serious difficulty, and the rules framed under section 279 of the Manual have little or no effect. It should be possible for the senior medical officer who is now going to Port Blair to organise a better and more frequent system of inspections. It is hoped also that the proposed history ticket will enable these inspections to be of more use, and that medical officers will record on them their opinion as to the fitness of a convict for any special form of work for which he is required. They will at a glance be able to see the medical history of the prisoner as it is recorded on his ticket, and will be able to draw proper conclusions as to his fitness for any particular work. I should like to see the weight test introduced and worked in every station. If, however, this is not possible for the present, I certainly think that prisoners employed on such industries as jungle-cutting or brick-moulding should be weighed once a fortnight, and all those found losing weight paraded apart from the rest of the gang and subjected to more careful medical examination. If it is found necessary, change of work or removal to hospital could then be ordered. The occupations that send the largest number of men to hospital ought to be well known by this time; it is to the prisoners employed on these works that I would at first apply the weight test. To have the weight correctly taken, a Civil Hospital Assistant should be deputed to do it, and, if possible, a detaining hospital with proper means for conveying the sick to the main hospital should be organised. I am not aware of the circumstances which have led to the abolition of the detaining hospitals referred to in section 258 of the Manual. It certainly seems to me that it would be a great advantage to have such a hospital at Annickhet for instance. That the injudicious selection of convicts by executive officers for such labour as jungle-cutting has had a serious effect on the sickness and death-rate I have not the least doubt. As a case in point, I may refer to the last selection of prisoners made by the executive officer in charge of the Southern Division of the Northern District for

work at Anniekhet. We found on our visit that several of these men were quite unfit for the work and should never have been sent there.

10. The last point to which I wish to refer here is the early treatment and segregation of certain diseases. Ulcers and wounds of the lower extremities are the most common causes of admission to hospital, and a large proportion of these cases end in severe ulcerations which are difficult to cure. As long as a considerable number of prisoners have to wear fetters either in the chain-gang or on first arrival in the Settlement, there will always be this tendency to ulceration of the legs either caused by accidental abrasions or by the prisoners' own action in creating sores with the view of having the fetters removed and of being admitted into hospital. The hospital buildings are all made of wood, and as they have been occupied for many years by prisoners suffering from all forms of ulcerations and gangrene, it is reasonable to expect that the wood-work has so to speak become saturated with septic poison. The chance of an ordinary wound healing in these buildings is very small. Further, although care is taken to dress the cases properly with ordinary dressings, no attempt seems to be made to adopt a strictly antiseptic method of treatment in these cases. If ever this plan of treatment was necessary in dealing with wounds, it is wanted here where the chances of septic poisoning are so great. The injury to health from these causes is so serious and the loss of labour to the Settlement so great that special measures appear to me necessary for dealing with these cases. The following suggestions are offered for consideration:—

- (1) The hospitals and wards reserved for the treatment of wounds should be separate from those in which ulcers are being treated.
- (2) The wood-work of both the ulcer ward and the ward reserved for wounds should, if it is not possible to have masonry buildings, be painted with a silicate paint which should be periodically washed with a cheap antiseptic fluid.
- (3) Sir Joseph Lister's new antiseptic, the double cyanide of zinc and mercury, the method of using which is described in the British Medical Journal of the 9th November 1889 and 1st January 1890, should be given a thorough trial, and the manner of using these dressings should be carefully explained to, and practised by, not only the Hospital Assistants, Compounders, and Dressers, but also by the Jemadars and Tindals of stations and barracks.
- (4) Two or three small cells should be provided in all stations for the treatment of these cases. If it is not possible to build new cells, the lower story of a barrack when sufficiently high might be partitioned off into cells 11 × 11 into which should be locked, in separate confinement, all prisoners suffering from small wounds and abrasions. If these cases were first treated by the Station Jemadar on the antiseptic plan above recommended, it is certain that a vast number of the cases which now go to hospital would not find their way there and would be cured in a few days.
- (5) No attempt to heal wounds and cure ulcers will however be successful unless it is to the convict's interest to assist in his own cure; without this the best antiseptic methods will fail. Some means must therefore be devised to obtain this co-operation. This it is proposed to get by keeping the patient locked up in his cell continuously, and giving him some form of labour which, while it does not unduly tax his strength, will make his confinement in cells irksome.
- (6) When a cellular jail is provided it should be possible to abolish the use of fetters in the Settlement altogether.

I am satisfied that by measures such as those above described, it will be possible to increase the labour force of the Settlement by 2 or 300 men, to lessen the number of deaths from gangrene and prevent those severe permanent injuries to the lower limbs which in many cases result from ulcers.

11. The complete segregation of all prisoners suffering from phthisis and tubercle in any form should be adopted without delay, and this separation should not only be effected in all cases under treatment in hospitals but in those where although the disease is known to exist the prisoner is able to do light work. If this precaution was adopted, all chance of communicating the disease to others would be avoided, and the death-rate from this cause would be lowered by having the patients properly cared for in the early stages of the disease. No less than 110 prisoners were admitted with phthisis in 1888, and of these 65 died. This disease next to dysentery and remittent fever causes the largest number of deaths, and it seems to me necessary that special measures should be taken in regard to it. I would also advocate the painting of the phthisis ward with silicate paint, the surface of which can be kept clean.

12. The disease under which the largest number of deaths were returned in 1888 was dysentery. There were in that year 1,051 admissions from dysentery with 105 deaths. It is a well-known fact that there is no disease common to Indian jails which has been so successfully dealt with as dysentery. This improvement in the mortality from dysentery in jails has been mainly due to the following precautions, and it seems to me that these should be taken into consideration in dealing with this disease in the Settlement: (1) The early detection of the first symptoms of the disease and its immediate treatment with ipocacuanha are matters of great importance. For this purpose rules should be framed similar to those recommended in paragraph 9, page 18, of the Jail Committee's report. (2) Wet clothes and chills resulting from them are one of the main causes of the disease. It is hoped that the drying chambers I have recommended will prevent this. (3) The worst and most intractable cases which give the largest percentage of deaths occur in and immediately after the rains, among prisoners suffering from

anæmia and the scorbutic condition with spongy ulcerated gums, which supervenes after much exposure to malaria. It is important that all prisoners in this condition, whether in hospital or in the convalescent gang, should be treated with the greatest care. The remedies found most efficacious in these cases are quinine and iron with a liberal milk-diet. The use of onions in the diet in large quantities during the rains has also been found very successful in these cases. It is also found necessary to issue a certain quantity of mustard or cocoanut oil for rubbing on the bodies of these anæmic patients. For people who wear so little clothing this is a great protection from chills. (4) We found these cases being treated among the other hospital patients. This should not be allowed. All cases of dysentery should be carefully segregated in separate wards and the worst cases treated in small isolated wards. The hospital ward set apart for such cases should also be painted with silicate paint, and the surface frequently washed with a fluid disinfectant.

13. There were 398 admissions from remittent fever and 76 deaths in 1888. In the light of the information which has for some time been accumulating in India in regard to the prevalence of specific continued fevers which have hitherto been classified under the head of remittent fever, it seems necessary to have cases of continued fever in the Settlement carefully watched. Accurate charts of temperature should be kept, together with the record of such other symptoms as are necessary to enable a correct diagnosis to be formed in these cases. It is essential also to have a careful *post-mortem* in every case. It will be interesting to know whether any of these were cases of cerebro-spinal meningitis. This disease which was formerly classed as a remittent fever is now known to prevail in jails in Bengal and in emigrant ships. In one case of a severe continued fever in the Chatham Hospital, we found that some observations as to temperature had been roughly recorded in pencil on the back of the bed-head ticket. This is useless for any practical purpose, and charts should be obtained from the Medical Department for these records.

14. The large amount of sickness caused by diseases of syphilitic origin could be diminished by collecting all these cases together and treating them on the German method of mercurial inunction with massage, combined with immersion in salt water at 97° Fahrenheit for half an hour daily. This treatment, carried out for three months and repeated after an interval of six months for a month, will effect a permanent cure in the worst cases. Under the present system of treatment, which only effects a temporary improvement, the prisoners suffering from syphilis are constantly going in and out of hospital, and are active agents in spreading the disease in the Settlement. It should be possible to stamp out this disease in Port Blair in the course of the next few years.

15. Many of the hospital barracks, especially those at Ross and Chatham, are of an old and obsolete pattern. If they are replaced by new buildings, these structures should be erected in accordance with the instructions contained in paragraphs 8 and 18, Chapter 3 of the Jail Committee's report. No such building should under any circumstances have more than two rows of beds. In one small ward containing the most serious cases in Chatham Hospital, I found no less than five beds between the ventilating doors. There are a few iron and wooden beds in each of the large hospitals, but the majority of the patients lie on the wooden floor. This insanitary proceeding must result in the soiling of the planks with discharges, and cannot but affect injuriously the patients who afterwards occupy the same spot. I would advocate the provision of an iron cot for every patient in hospital. A pattern of the most suitable cot for the purpose can be had from the Alipore Jail. Hoop iron, of which there appears to be a large quantity in the Settlement, could be used in their construction. The advantages of such a bed are that it raises the patient off the floor where the heavy tainted air, loaded with organic impurities, accumulates; that it does not harbour vermin, and that it can be thoroughly purified by lighting a grass fire under it and repainting it with tar.

16. I enquired into the causes of the comparatively high mortality among the female prisoners in the Settlement during the last two years, when the death-rate after it had been much below 2 per cent. for nine years and 1 per cent. and under for five years rose suddenly to 4.69 per cent. in 1888 and 8.33 in 1889. The female convict population in the whole Settlement was 1,002 in 1888 and the number of deaths 47. As all the female convicts except those confined at South Point are scattered throughout the Settlement and the mortality among them was as low as 1.3 per cent., it is unnecessary here to refer to those outside the jail. Of the 47 deaths 38 occurred in the South Point Jail. The women confined in the jail numbered about a third of the whole female population, *viz.*, 333, and the death-rate among them rose in 1888 to 11.41 per cent. from 3.1 per cent. in 1887. With this increase in the mortality the daily sick-rate was nearly double that of the previous year, 6.4 per cent. as against 3.8 in 1887, as compared with a sick-rate of 5.91 per cent. for the whole of the convicts in the Settlement. The medical authorities offer no explanation for this extraordinary increase in the death-rate except the unhealthiness of the season. It is difficult to imagine that this can have been the only cause of so extraordinary a mortality among specially selected healthy young women. In page 83, paragraph 24 of the report will be found a meagre reference to this point; the subject appears to me to have called for a more complete and detailed report, and the attention of the new senior medical officer should be drawn to this important subject. As has been stated, the season was a very unusual one as regards the rainfall, especially in June. This locality may, like other similar ones on the coast, such as Perseverance Point and Navy Bay, have become extremely unhealthy from causes which are not at present known. Apart from this, there are two conditions in the locality and its neighbourhood which require to be attended to. The reclaimed swamp which lies between South Point and Aberdeen and which is now planted with cocoanuts is liable to inundation and to have the water lodging over a great portion of it after rain. This defect will be remedied, as convict labour has for some time been employed in raising the level of the

land with earth from the neighbouring hill. There is a large fresh water tank in the centre of the female jail. The health of the inmates should be watched in connection with the rise of the water in this tank. If possible, the tank should be kept at a uniform low level throughout the rains. The general health of the female prisoners on the day of our visit seemed excellent. There was no trace of ill-health caused by malaria, except in one or two women from unhealthy districts in Bengal.

17. It appeared to me that the orders issued in Resolution No. 4—212, dated 23rd March 1886, regarding the selection of prisoners for the Andamans have been working well, and there is no necessity to make any alterations therein. I saw a few cases in which the selection had not been made in accordance with the rules laid down. These cases will in due course be brought to the notice of the Local Governments concerned.

18. The table below, which has been compiled from the annual reports since 1876-77, shows the death-rate per mille among the convicts, according to length of residence in the Settlement (the figures for the Nicobars have been excluded). It will be seen how large a proportion the deaths during the first twelve months after arrival bear to the total mortality :—

Year.	Under 6 months.	From 6 to 12 months.	From 1 to 2 years.	From 2 to 3 years.	From 3 to 7 years.	Above 7 years.	Total.
1876-77 . .	31·87	63·65	221·71	37·40	23·07	45·13	41·77
1877-78 . .	55·37	162·85	71·73	56·30	33·98	39·47	49·04
1878-79 . .	25·24	165·46	179·81	67·56	36·62	57·07	62·26
1879-80 . .	34·06	242·29	92·18	50·56	24·42	41·28	42·96
1880-81 . .	56·12	313·00	72·20	48·08	35·38	39·75	49·52
1881-82 . .	43·42	428·57	73·89	43·24	38·18	45·05	45·83
1882-83 . .	13·20	123·07	28·03	51·12	35·29	32·40	33·78
1883-84 . .	6·66	22·47	20·77	16·68	22·62	13·12	15·99
1884-85 . .	5·53	43·01	13·55	11·20	16·24	17·93	16·27
1885-86 . .	1·15	21·05	28·84	10·91	19·13	19·33	17·91
1886-87 . .	20·36	27·63	12·97	13·11	16·57	22·88	20·19
1887 . .	7·58	62·60	9·24	18·87	21·29	28·90	23·09
1888 . .	54·05	150·89	17·73	55·65	43·65	42·39	40·98

With our proposal that the first two years of a convict's residence in the Settlement should be passed in jail, it is hoped that the acclimatization of newly arrived convicts will be accomplished under the most favourable circumstances, and that such a terrible death-rate as 180 per mille among a selected body of men under fifty years of age will never be again possible. Pending the construction of the jail and the introduction of the system of preliminary confinement, it would perhaps be well to introduce the weight test at once for the early detection of loss of health among the convicts who have been less than a year or 18 months in the Settlement.

19. The last point I would notice in regard to the medical administration of the Settlement is the necessity that exists for determining within the next two or three years by a carefully prepared series of statistics, the comparative healthiness of the different stations in the Settlement. It is already known that some places like Navy Bay, Perseverance Point and Minnie Bay have the reputation of being unhealthy, while others are comparatively salubrious. It should be possible after excluding diseases which cannot possibly be caused by any conditions of locality to determine fairly accurately the order of healthiness of the different stations and villages. More data especially regarding the latter are required, and these might be obtained from the "chowdries" of villages. All cases of illness for which admission to hospital is not sought might be recorded by them. Hitherto the smaller islands and the coast have been supposed to be the most salubrious parts of the Settlement, but from what I saw of the appearance of the self-supporters in Hobdaypore, Tusonabad and even the newly cleared location of Cadellganj, I came to the conclusion that it is more than probable that the stations in the interior after they have been cleared and occupied for some time will be found more uniformly healthy. Information on this point will be very valuable and should be obtained without delay.

A. S. LETHBRIDGE.

APPENDIX D.

Statement of conditionally released and ex-convict residents at Port Blair, 1st February 1890.

Districts.	CONDITIONALLY RELEASED.		EX-CONVICTS.	
	Males.	Females.	Males.	Females.
Southern District	33	1	227	207
Northern District	3	2	71	56
TOTAL	36*	3	298	263

* Twenty-five of these are convicts who have been released on Police surveillance in India and permitted to reside in the Settlement.

APPENDIX E.

Statement of convicts sentenced for certain offences who have been punished for similar offences at Port Blair.

Offences.	Number at Port Blair on 31st March 1892.	NUMBER OF YEARS IN SENTENCE.								NUMBER OF TIMES PUNISHED FOR SIMILAR OFFENCES AT PORT BLAIR.				
		One year.	Under two years.	Under three years.	Under four years.	Under five years.	More than five years.	Life.	Death.	Port Blairs.	Five years.	More than five years.	Life.	Death.
Theft	511	26	78	84	87	60	279	41	13	3	1	1	1	29
Receiving stolen property	120	23	23	25	7	1	12	10	..	..	..	..	..	10
House-breaking	318	19	36	17	23	7	125	11	3	..	..	..	..	11
Criminal trespass	161	18	19	31	18	16	19	3	1	..	..	..	..	4
TOTAL	1,133*	116	155	187	135	84	456	65	17	3	1	1	1	57

* Appendix VII of 1892-93.

APPENDIX F.

Present and Proposed Scale of Officers of the Andamans Commission and their pay.

PRESENT ESTABLISHMENT.				PROPOSED ESTABLISHMENT.				REMARKS.
Strength.	Cost per manseem.	Mean pay of appointment.		Strength.	Cost per manseem.	Mean pay of appointment.		
	R R	R a. p.			R R	R a. p.		
1 Chief Commissioner and Superintendent	2,500 to 3,000	2,875 0 0		1 Chief Commissioner and Superintendent	2,500 to 3,000	2,875 0 0		Increment in five years.
1 Deputy Superintendent	1,000 to 1,500	1,375 0 0		1 Deputy Superintendent	1,000 to 1,500	1,375 0 0		
1 Assistant ditto	850 to 1,000	962 8 0		1 First Assistant Superintendent	800 to 1,000	950 0 0		
1 Second Assistant Superintendent	700 to 850	812 8 0		1 Second ditto	750	750 0 0		
1 District Superintendent of Police	600 to 900	825 0 0		1 District Superintendent of Police	600 to 800	750 0 0		
1 Third Assistant Superintendent	500 to 700	650 0 0		1 3rd Grade Assistant Superintendent	600	600 0 0		
1 Extra Assistant Superintendent, 1st class	400 to 600	550 0 0		1 4th ditto	550	550 0 0		
1 Ditto ditto	400 to 600	550 0 0		1 5th ditto	500	500 0 0		
1 Ditto ditto	250 to 400	362 8 0		1 6th ditto	450	450 0 0		
1 Ditto ditto	250 to 400	362 8 0		1 7th ditto	400	400 0 0		
1 Ditto ditto	250 to 400	362 8 0		1 8th ditto	350	350 0 0		
11 Officers	7,700 to 10,350	9,687 8 0		11 Officers	8,500 to 9,900	9,550 0 0		
Total				TOTAL				
Monthly mean pay	...	9,687 8 0		Monthly mean pay	...	9,550 0 0		
Mean total yearly cost	...	1,16,250 0 0		Mean total yearly cost	...	1,14,500 0 0		
				Mean decrease per annum	...	1,650 0 0		

APPENDIX G.

Proposition Statement for Overseers' Service in Port Blair.

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PRESENT ESTABLISHMENT.		PROPOSED ESTABLISHMENT.			REMARKS.
Strength.	Cost per mensem.	Strength.	Cost per mensem.	Mean pay of appointment.	
1 Head Overseer	R 150	1 1st grade Overseer	R R 250 to 300	R a. p. 287 8 0	Increment in five years.
1 Overseer	130	2 2nd do. Overseers, on R175—225	350 to 450	425 0 0	
1 Ditto	120	3 3rd do. ditto, on R150—175	450 to 525	505 4 0	
2 Overseers, at R100	200	3 1st do. Assistant Overseers, on R100—125	300 to 375	355 4 0	
1 Overseer	80	3 2nd do. ditto, on R80—90	240 to 270	265 0 0	
		1 Apprentice	50	50 0 0	
6 Officers	680	12 Officers and one Apprentice	1,640 to 1,970	1,890 0 0	
Total		TOTAL			
Total yearly cost	8,160	Mean total yearly cost	.....	22,680 0 0	
		Mean increase per annum	.....	14,520 0 0	

